FIG. 1

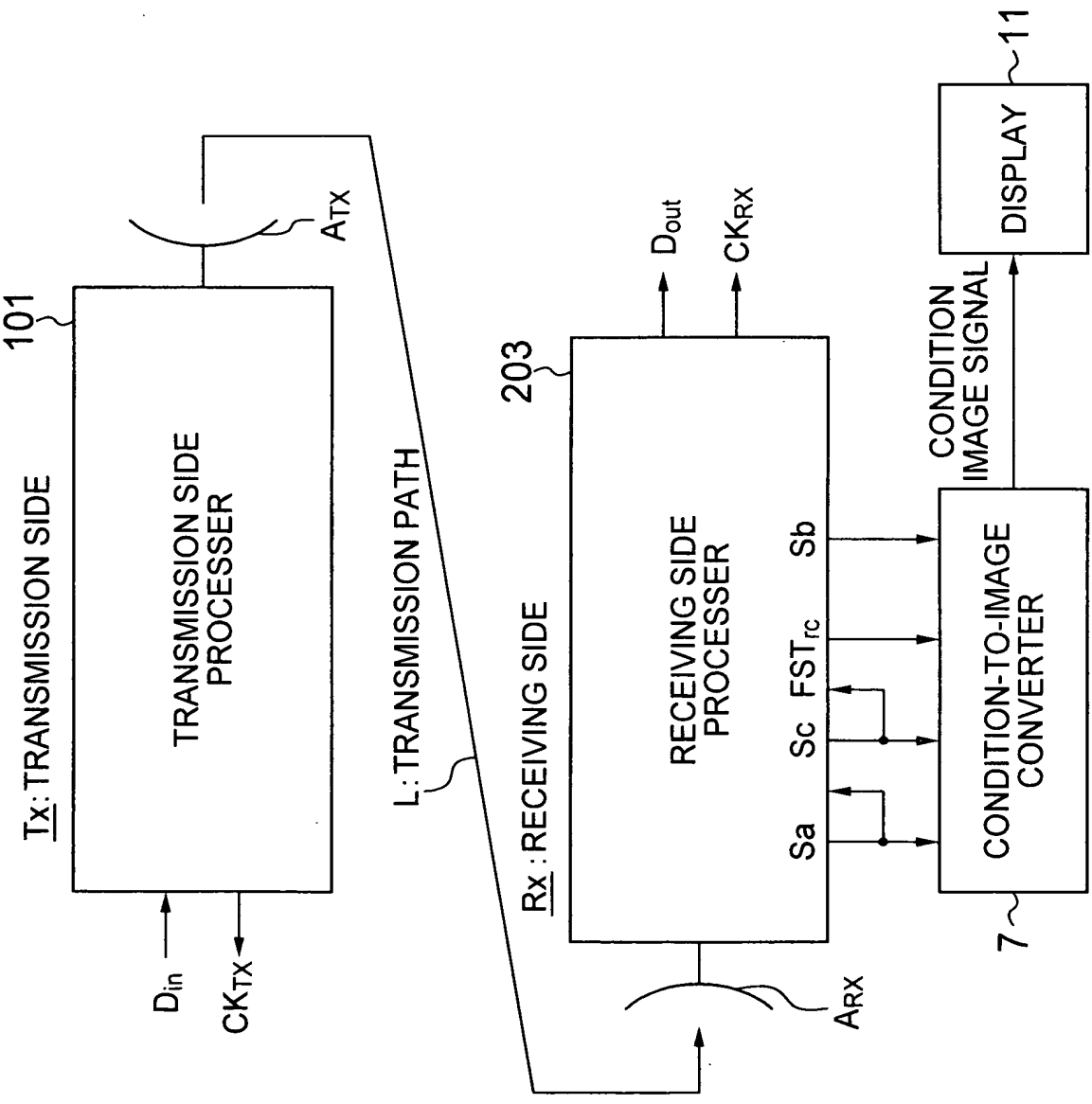

Tx: TRANSMISSION SIDE
101
TRANSMISSION SIDE PROCESSER
A_{TX}
D_{in}
CK_{TX}
L: TRANSMISSION PATH
Rx: RECEIVING SIDE
203
RECEIVING SIDE PROCESSER
D_{out}
CK_{RX}
Sa
Sc
FST_{rc}
Sb
A_{RX}
CONDITION-TO-IMAGE CONVERTER
7
CONDITION IMAGE SIGNAL
DISPLAY
11

FIG. 2A

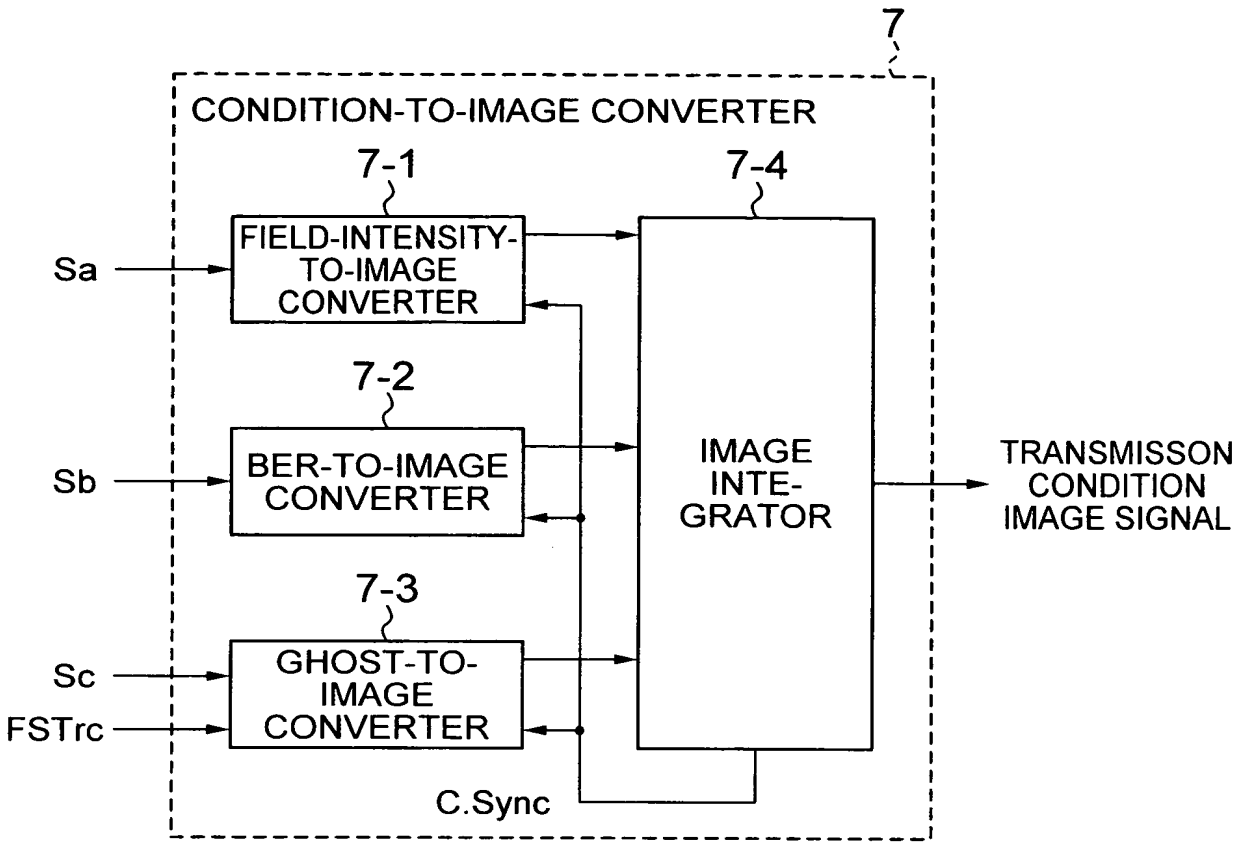

7
CONDITION-TO-IMAGE CONVERTER
7-1
7-4
FIELD-INTENSITY-TO-IMAGE CONVERTER
Sa
7-2
BER-TO-IMAGE CONVERTER
Sb
IMAGE INTE-GRATOR
TRANSMISSON CONDITION IMAGE SIGNAL
7-3
GHOST-TO-IMAGE CONVERTER
Sc
FSTrc
C.Sync

FIG. 2B

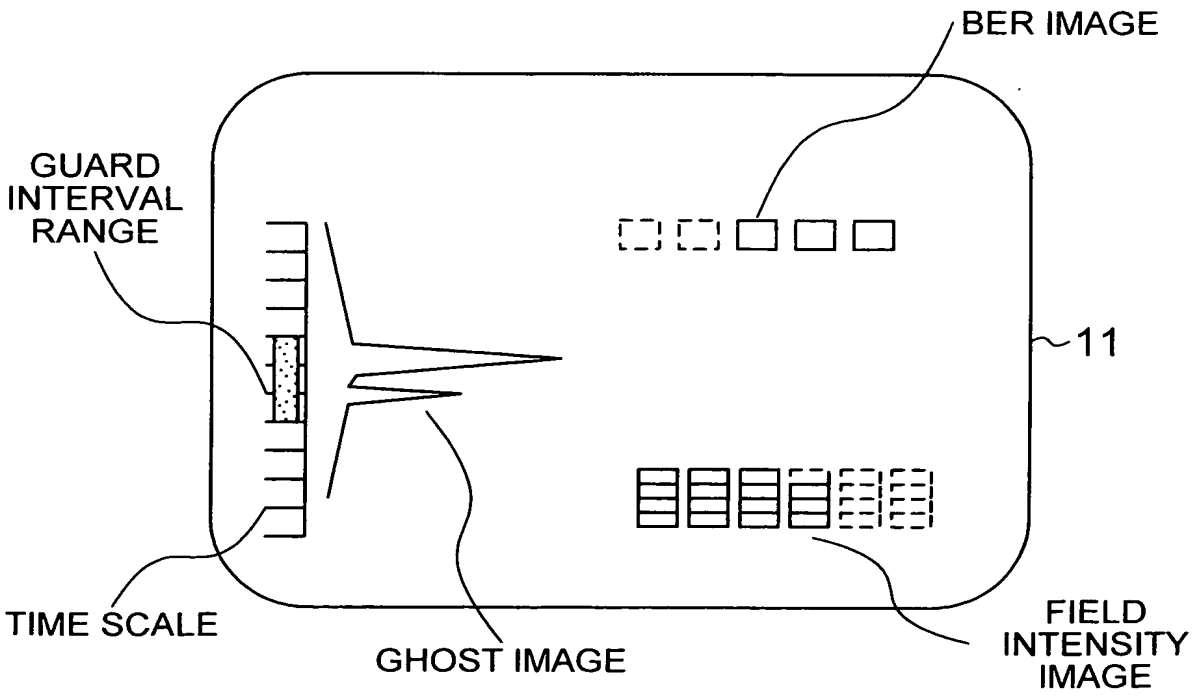

BER IMAGE
GUARD INTERVAL RANGE
11
TIME SCALE
GHOST IMAGE
FIELD INTENSITY IMAGE

FIG. 3A

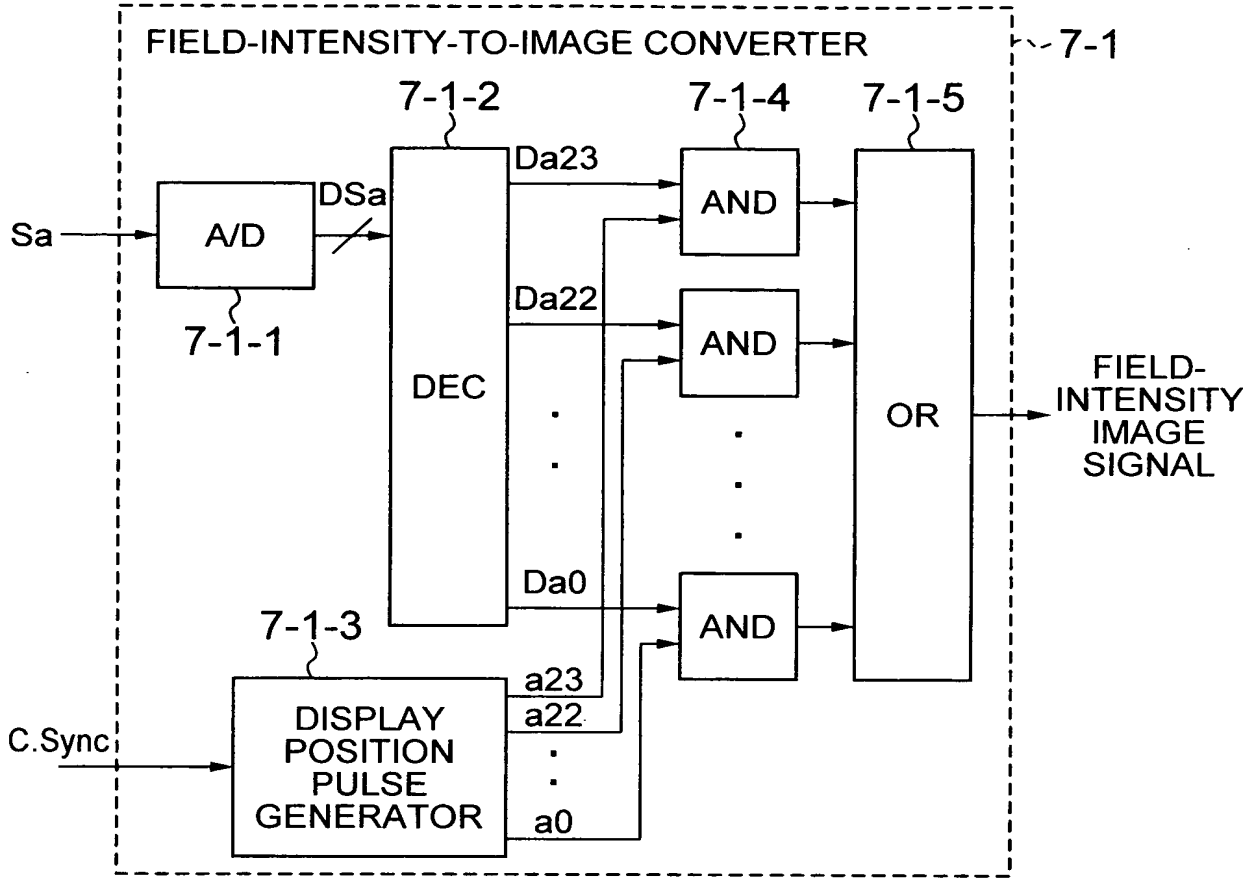

FIELD-INTENSITY-TO-IMAGE CONVERTER
7-1
7-1-2
7-1-4
7-1-5
Sa
A/D
DSa
7-1-1
DEC
Da23
Da22
Da0
AND
AND
AND
OR
FIELD-INTENSITY IMAGE SIGNAL
7-1-3
C.Sync
DISPLAY POSITION PULSE GENERATOR
a23
a22
a0

FIG. 3B

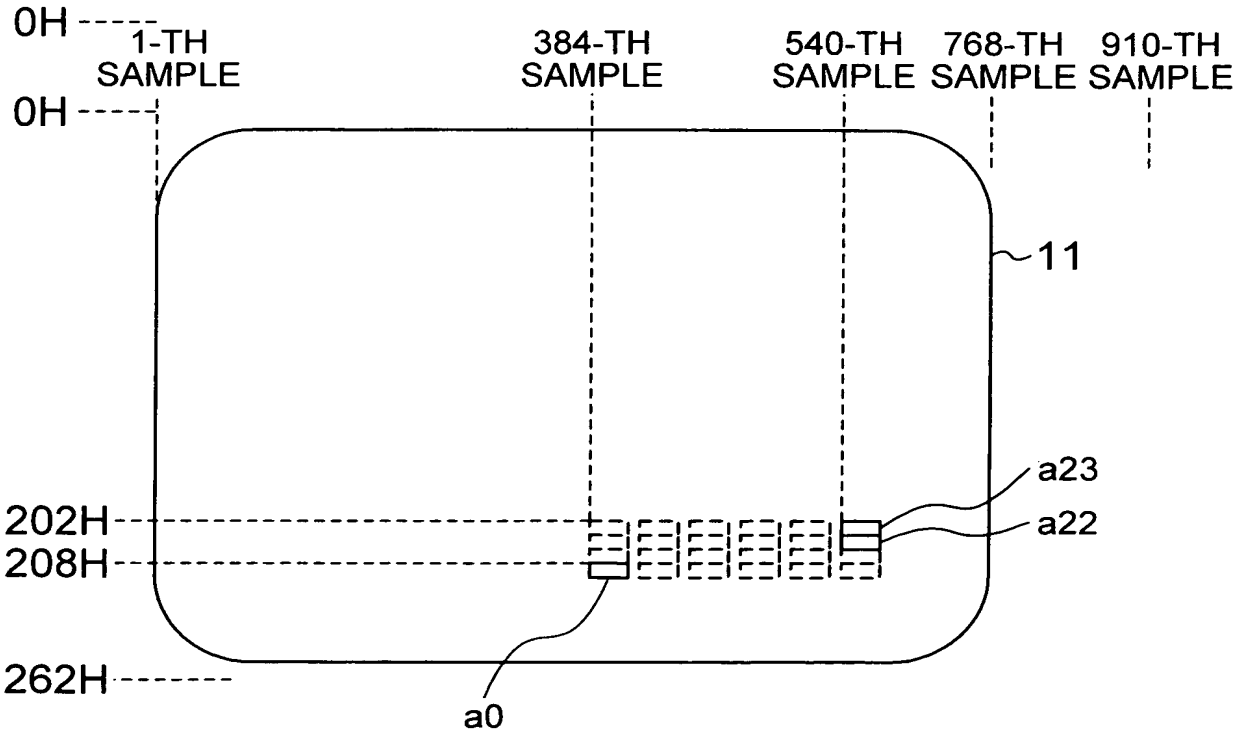

0H
1-TH SAMPLE
384-TH SAMPLE
540-TH SAMPLE
768-TH SAMPLE
910-TH SAMPLE
0H
11
a23
a22
202H
208H
262H
a0

FIG. 4A

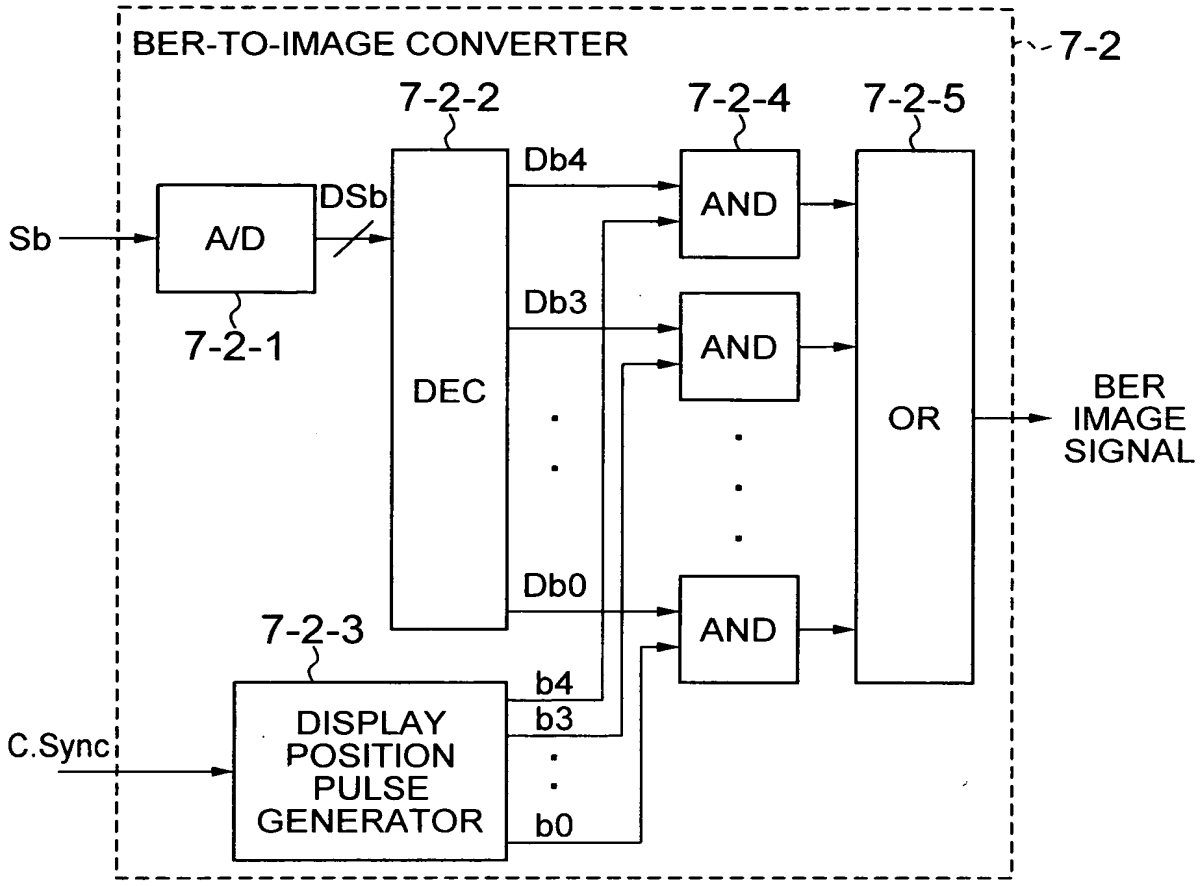

BER-TO-IMAGE CONVERTER
7-2
7-2-2
7-2-4
7-2-5
Db4
DSb
AND
Sb
A/D
Db3
AND
7-2-1
DEC
OR
BER
IMAGE
SIGNAL
Db0
AND
7-2-3
b4
b3
C.Sync
DISPLAY
POSITION
PULSE
GENERATOR
b0

FIG. 4B

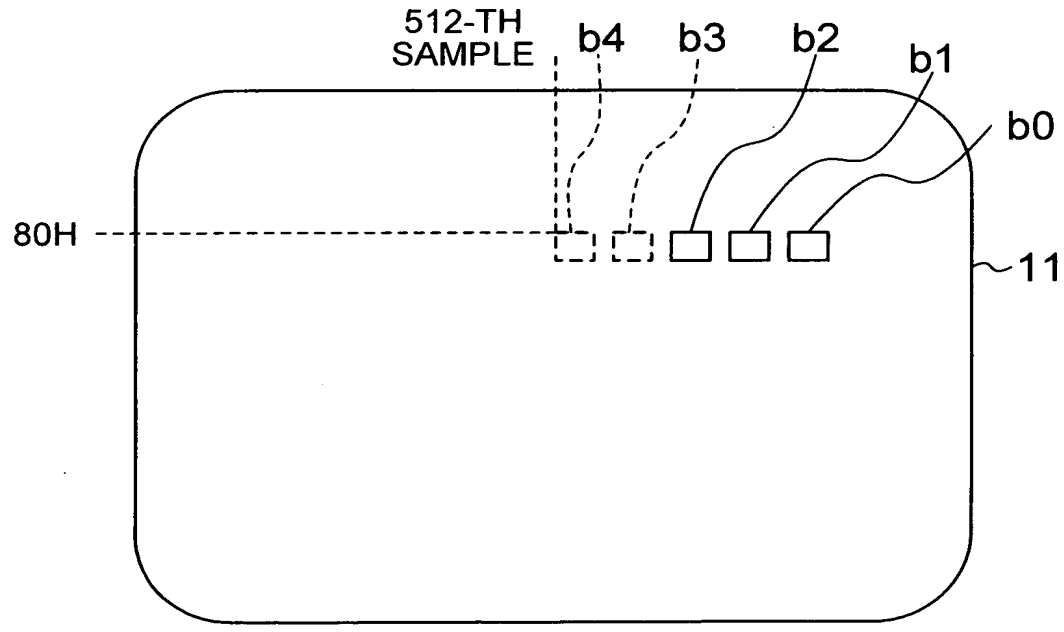

512-TH
SAMPLE
b4
b3
b2
b1
b0
80H
11

FIG. 5

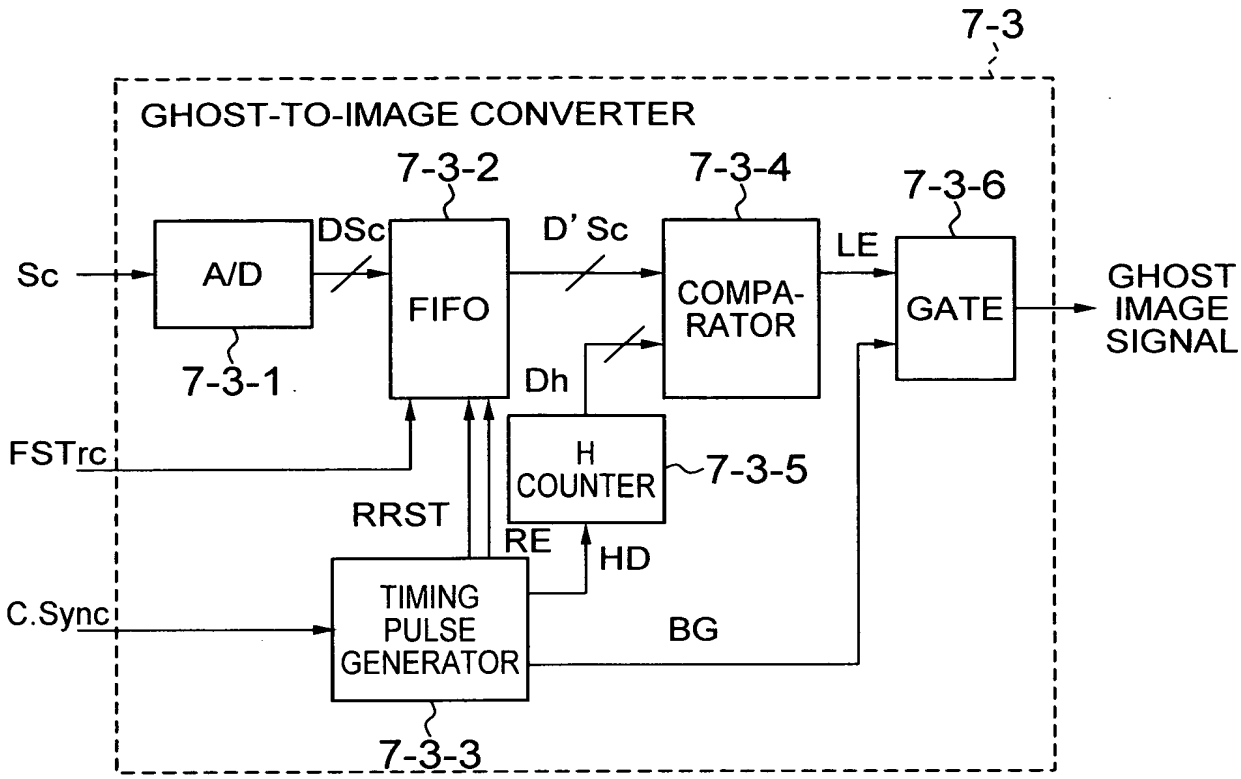

7-3
GHOST-TO-IMAGE CONVERTER
7-3-2
7-3-4
7-3-6
Sc
A/D
DSc
FIFO
D' Sc
COMPA-
RATOR
LE
GATE
GHOST
IMAGE
SIGNAL
7-3-1
Dh
FSTrc
H
COUNTER
7-3-5
RRST
RE
HD
C.Sync
TIMING
PULSE
GENERATOR
BG
7-3-3

FIG. 6

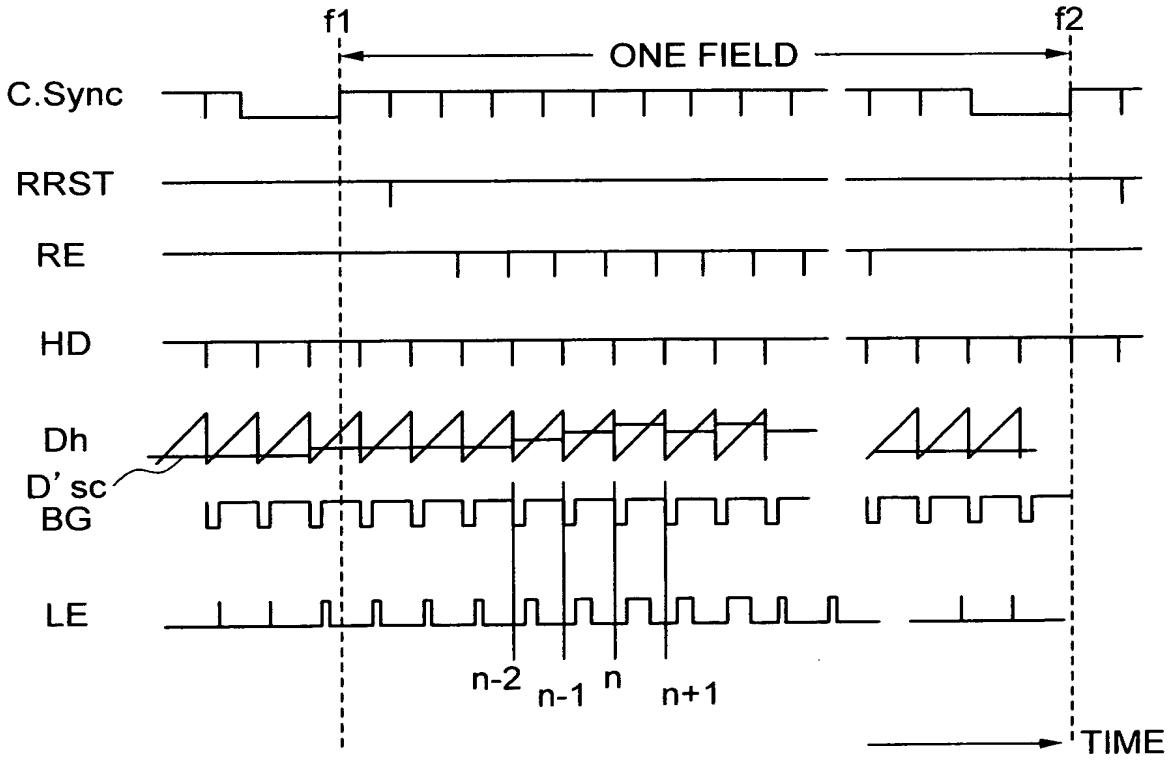

f1
ONE FIELD
f2
C.Sync
RRST
RE
HD
Dh
D' sc
BG
LE
n-2
n-1
n
n+1
TIME

FIG. 7

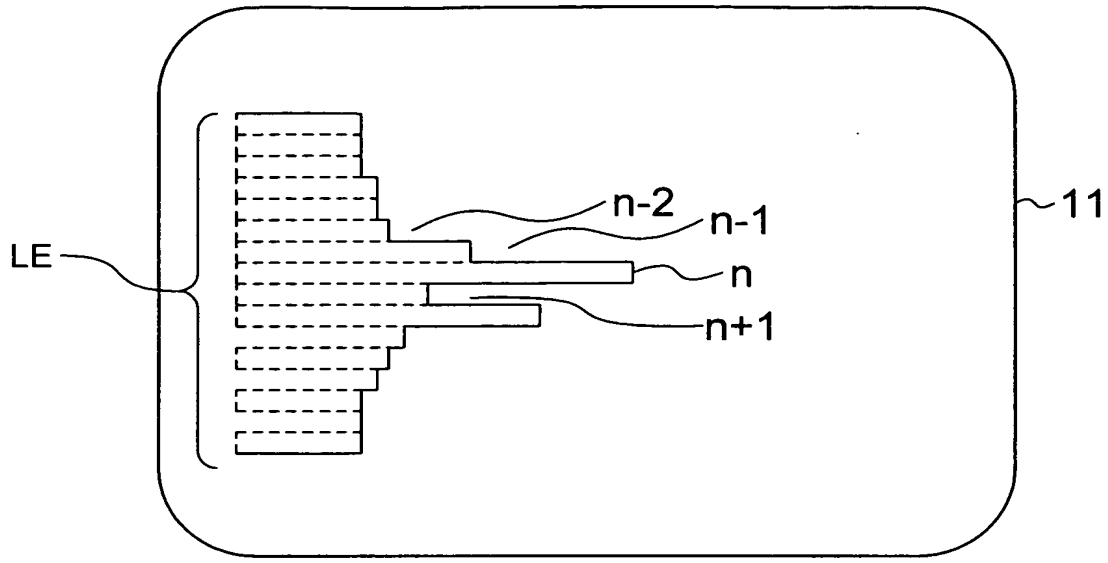

LE
n-2
n-1
n
n+1
11

FIG. 8

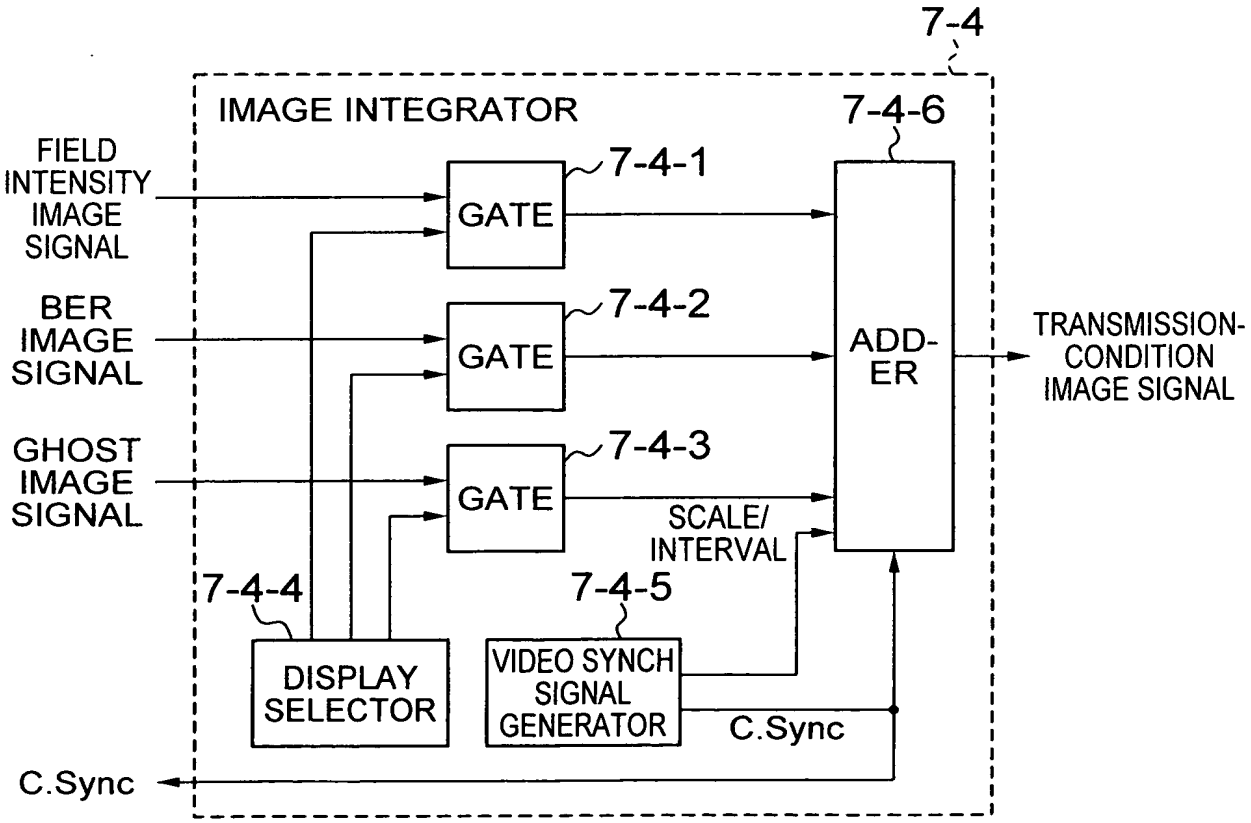

7-4
IMAGE INTEGRATOR
7-4-6
FIELD INTENSITY IMAGE SIGNAL
7-4-1
GATE
BER IMAGE SIGNAL
7-4-2
GATE
ADD-ER
TRANSMISSION-CONDITION IMAGE SIGNAL
GHOST IMAGE SIGNAL
7-4-3
GATE
SCALE/ INTERVAL
7-4-4
7-4-5
DISPLAY SELECTOR
VIDEO SYNCH SIGNAL GENERATOR
C.Sync
C.Sync

FIG. 9A

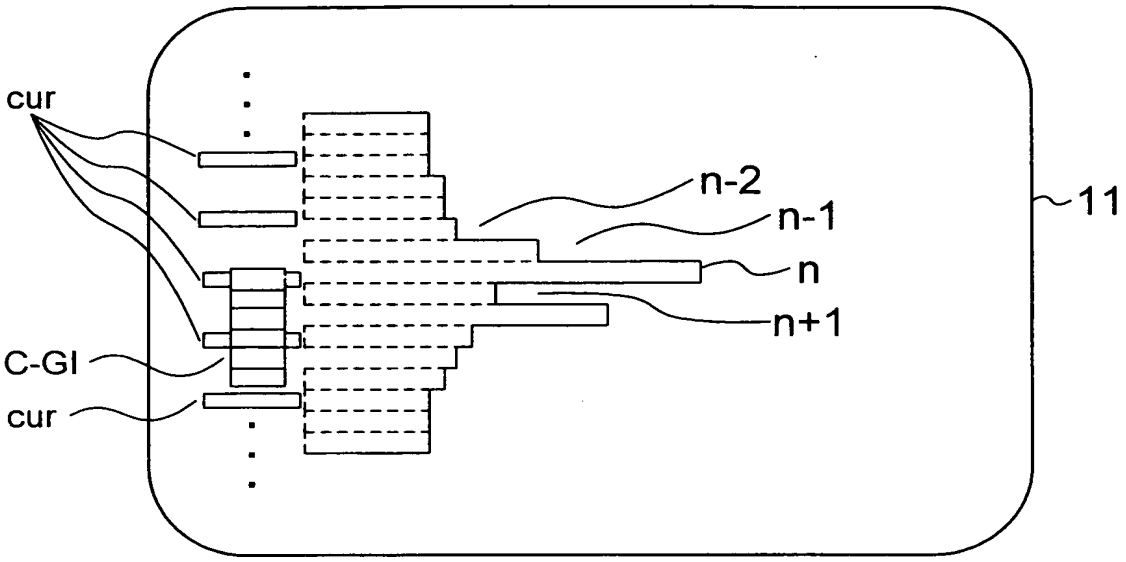


FIG. 9B

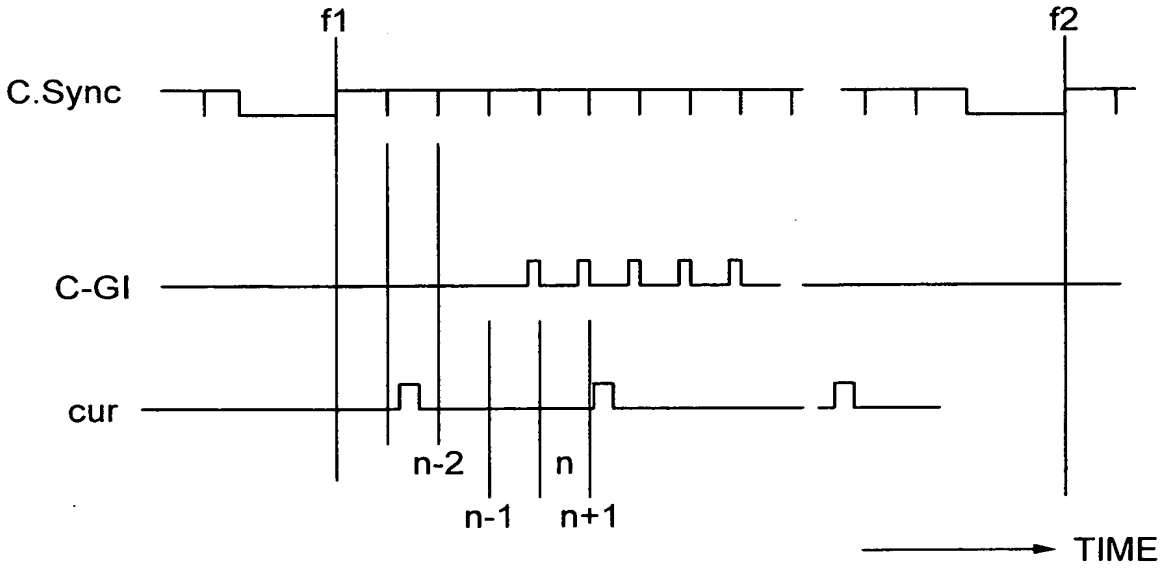


FIG. 10A

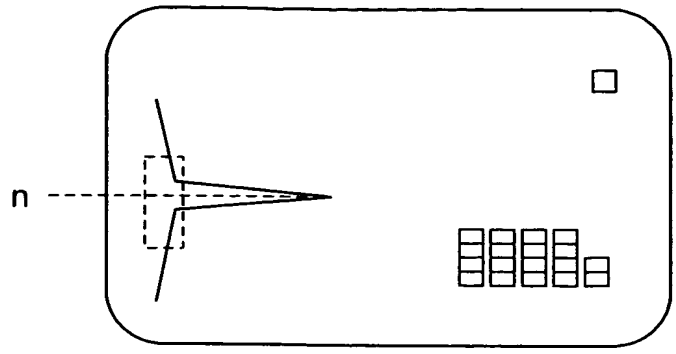


FIG. 10B

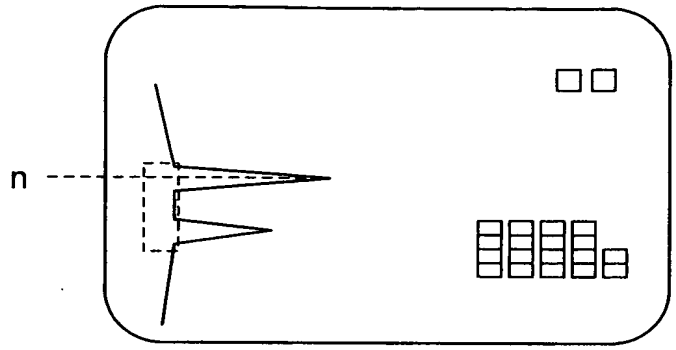


FIG. 10C

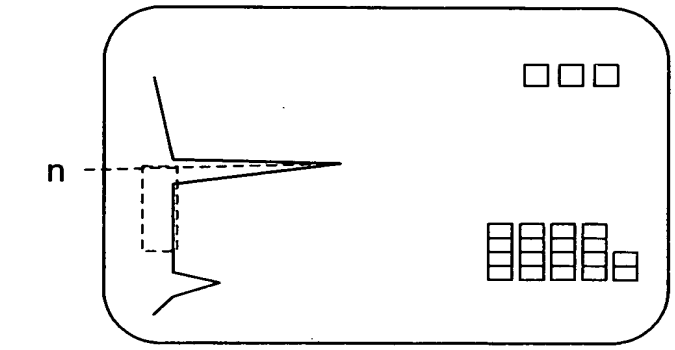


FIG. 10D

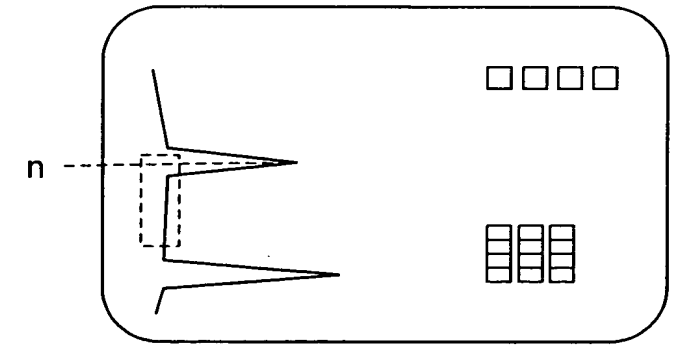


FIG. 10E

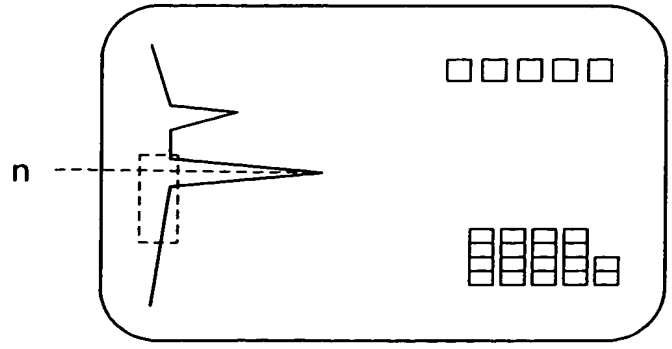


FIG. 11

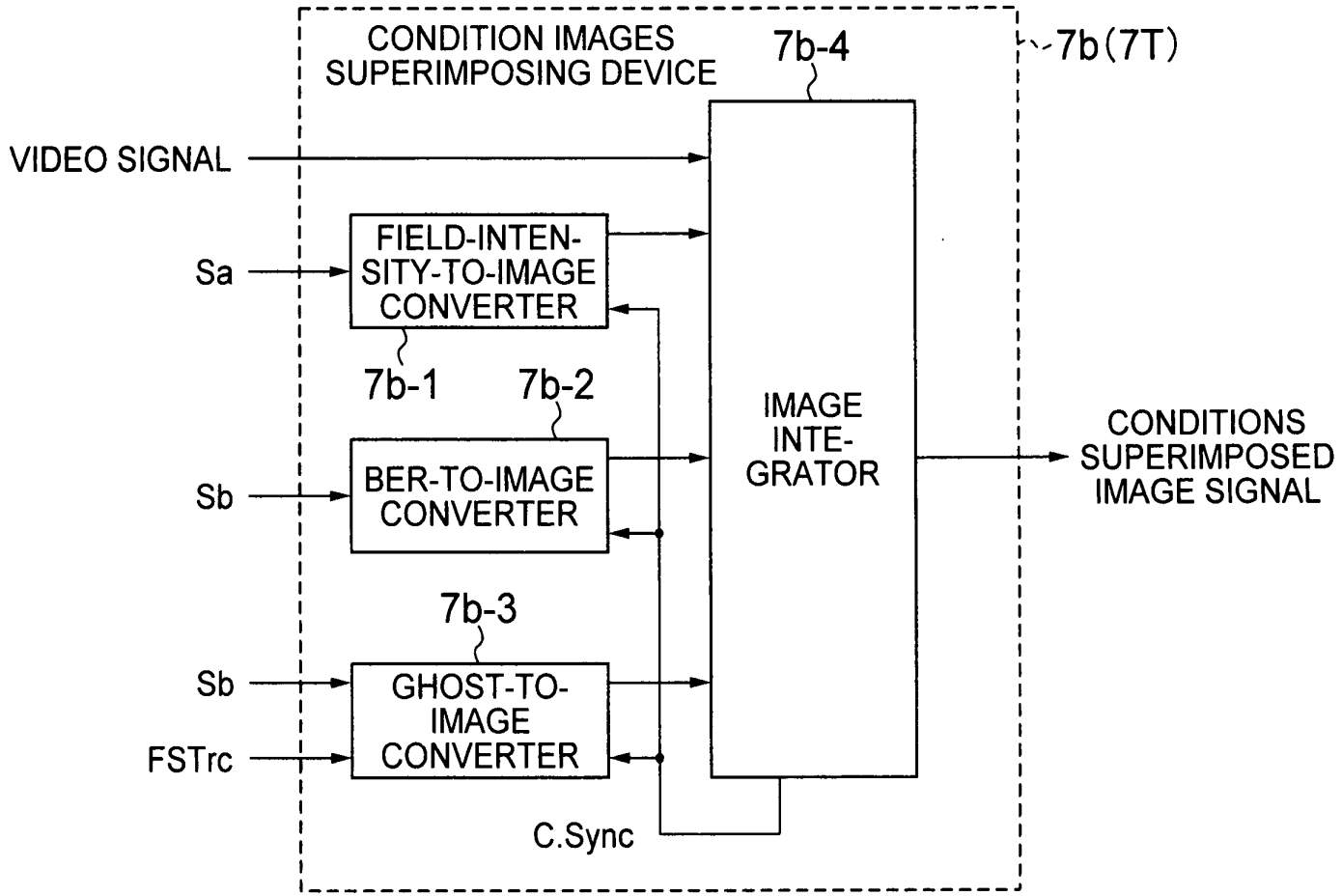

CONDITION IMAGES SUPERIMPOSING DEVICE
7b-4
7b(7T)
VIDEO SIGNAL
Sa
FIELD-INTEN-SITY-TO-IMAGE CONVERTER
7b-1
7b-2
Sb
BER-TO-IMAGE CONVERTER
IMAGE INTE-GRATOR
CONDITIONS SUPERIMPOSED IMAGE SIGNAL
7b-3
Sb
GHOST-TO-IMAGE CONVERTER
FSTrc
C.Sync

FIG. 12

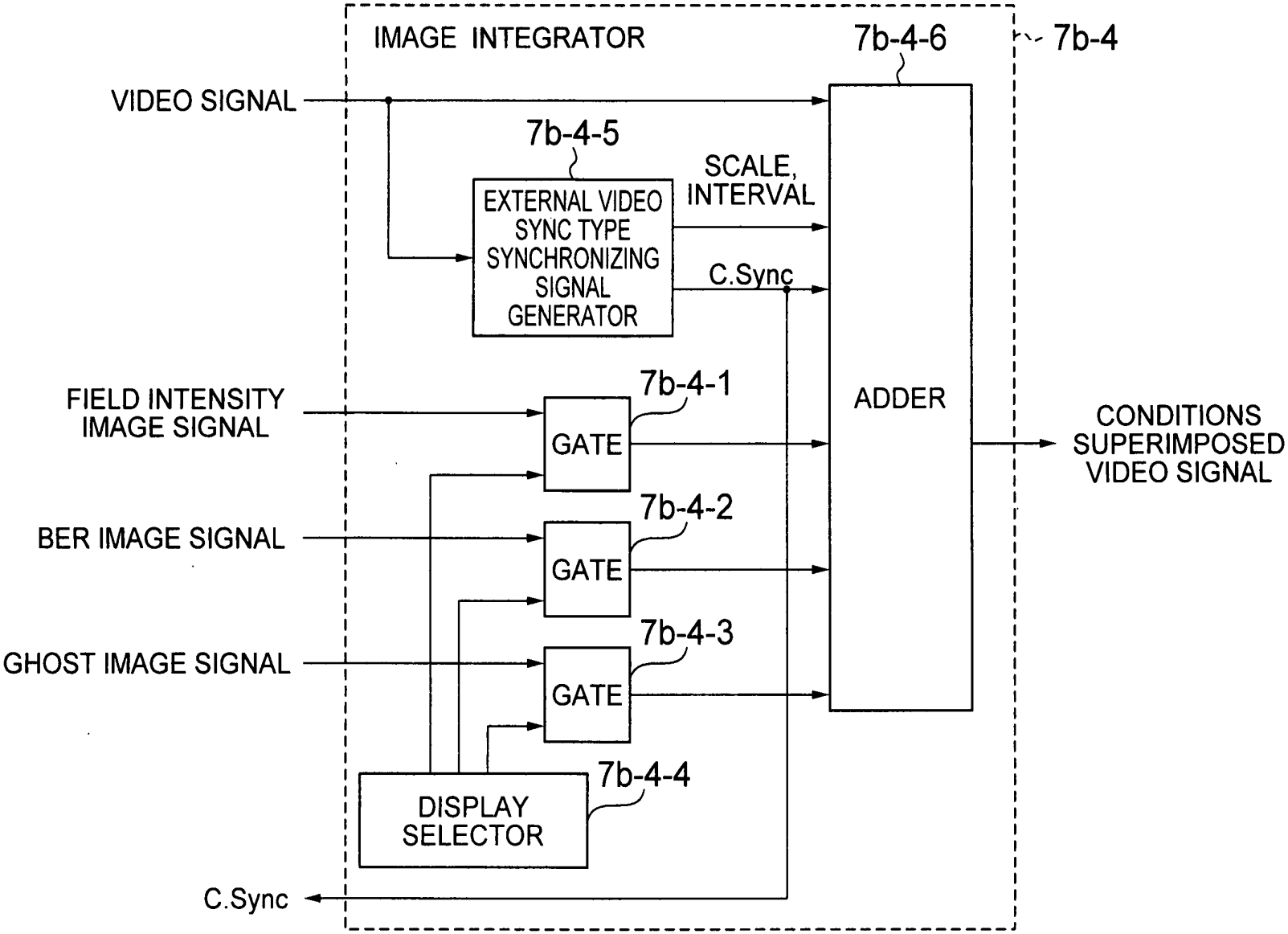


IMAGE INTEGRATOR
7b-4-6
7b-4
VIDEO SIGNAL
7b-4-5
EXTERNAL VIDEO SYNC TYPE SYNCHRONIZING SIGNAL GENERATOR
SCALE, INTERVAL
C.Sync
FIELD INTENSITY IMAGE SIGNAL
7b-4-1
GATE
ADDER
CONDITIONS SUPERIMPOSED VIDEO SIGNAL
BER IMAGE SIGNAL
7b-4-2
GATE
GHOST IMAGE SIGNAL
7b-4-3
GATE
7b-4-4
DISPLAY SELECTOR
C.Sync

FIG. 13

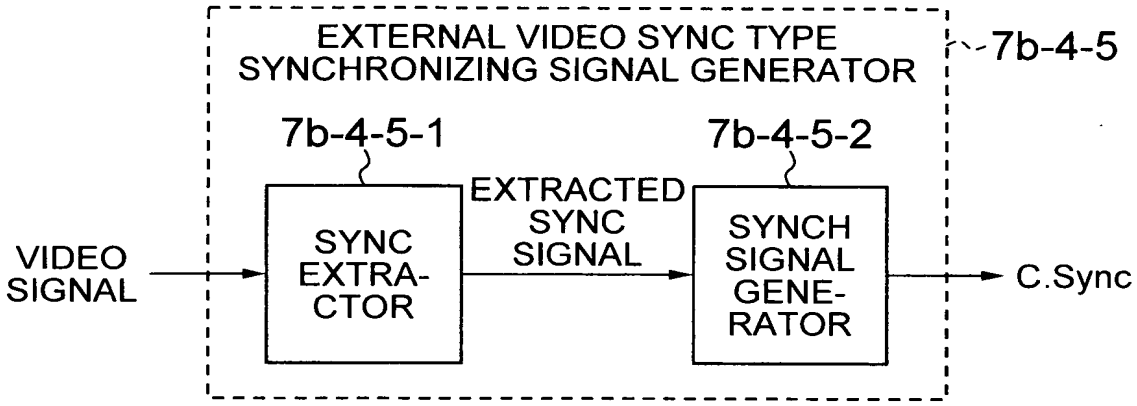

EXTERNAL VIDEO SYNC TYPE
SYNCHRONIZING SIGNAL GENERATOR
7b-4-5
7b-4-5-1
7b-4-5-2
VIDEO SIGNAL
SYNC EXTRA-CTOR
EXTRACTED SYNC SIGNAL
SYNCH SIGNAL GENE-RATOR
C.Sync

FIG. 14

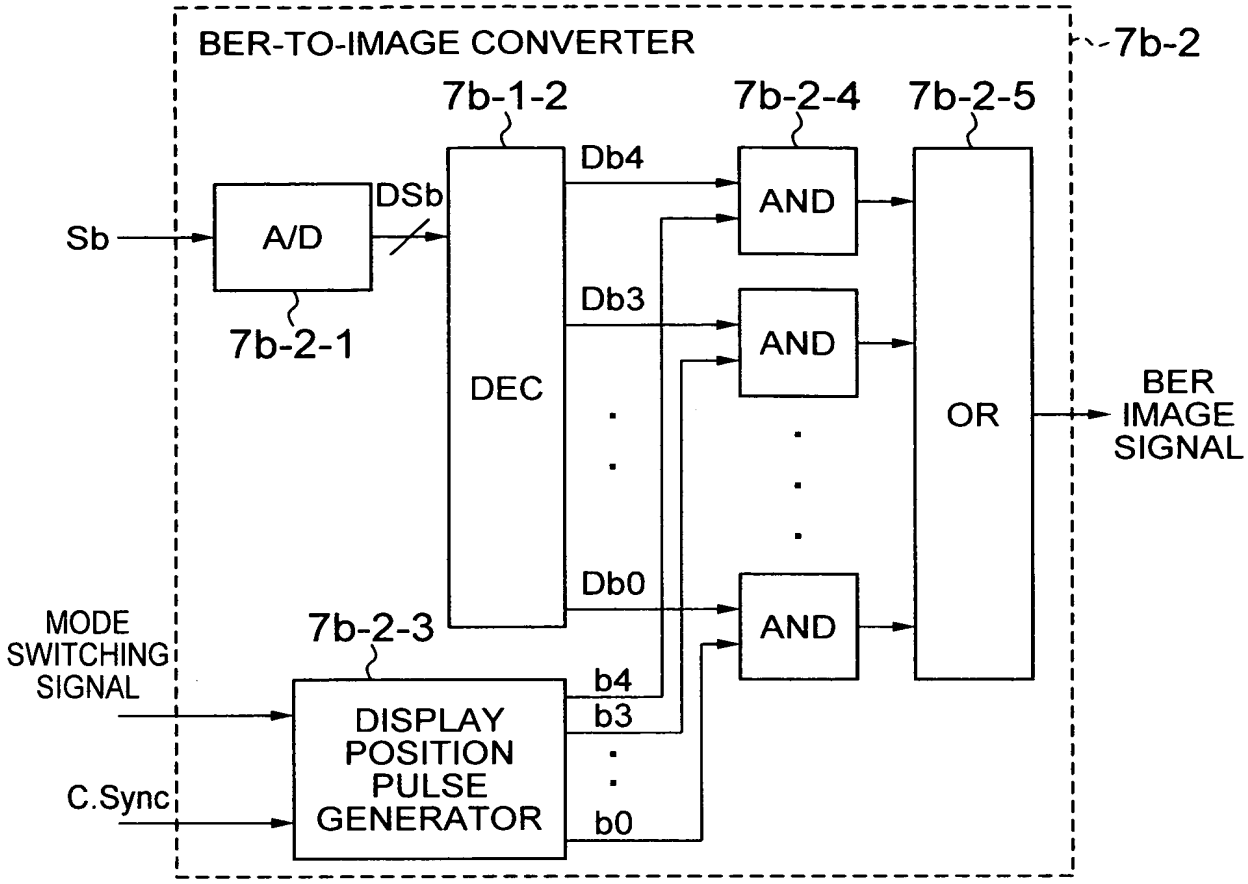

BER-TO-IMAGE CONVERTER
7b-2
7b-1-2
7b-2-4
7b-2-5
Db4
DSb
AND
Sb
A/D
Db3
AND
7b-2-1
DEC
OR
BER
IMAGE
SIGNAL
Db0
AND
MODE
SWITCHING
SIGNAL
7b-2-3
b4
b3
DISPLAY
POSITION
PULSE
GENERATOR
C.Sync
b0

FIG. 15

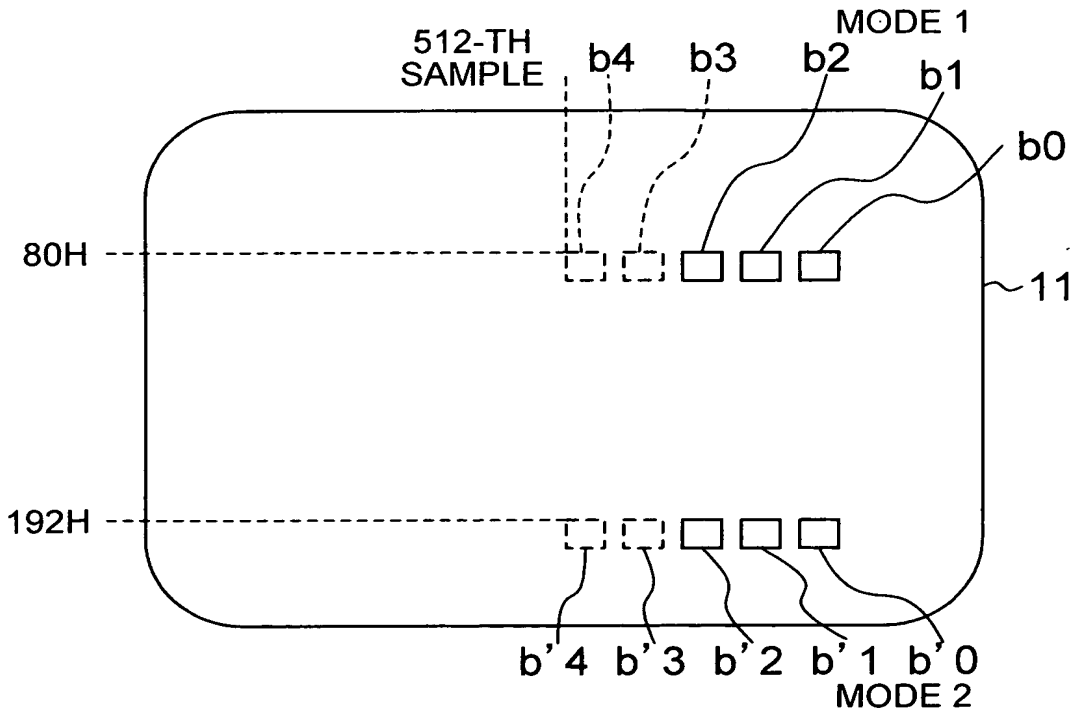

MODE 1
512-TH
SAMPLE
b4
b3
b2
b1
b0
80H
11
192H
b'4
b'3
b'2
b'1
b'0
MODE 2

FIG. 16

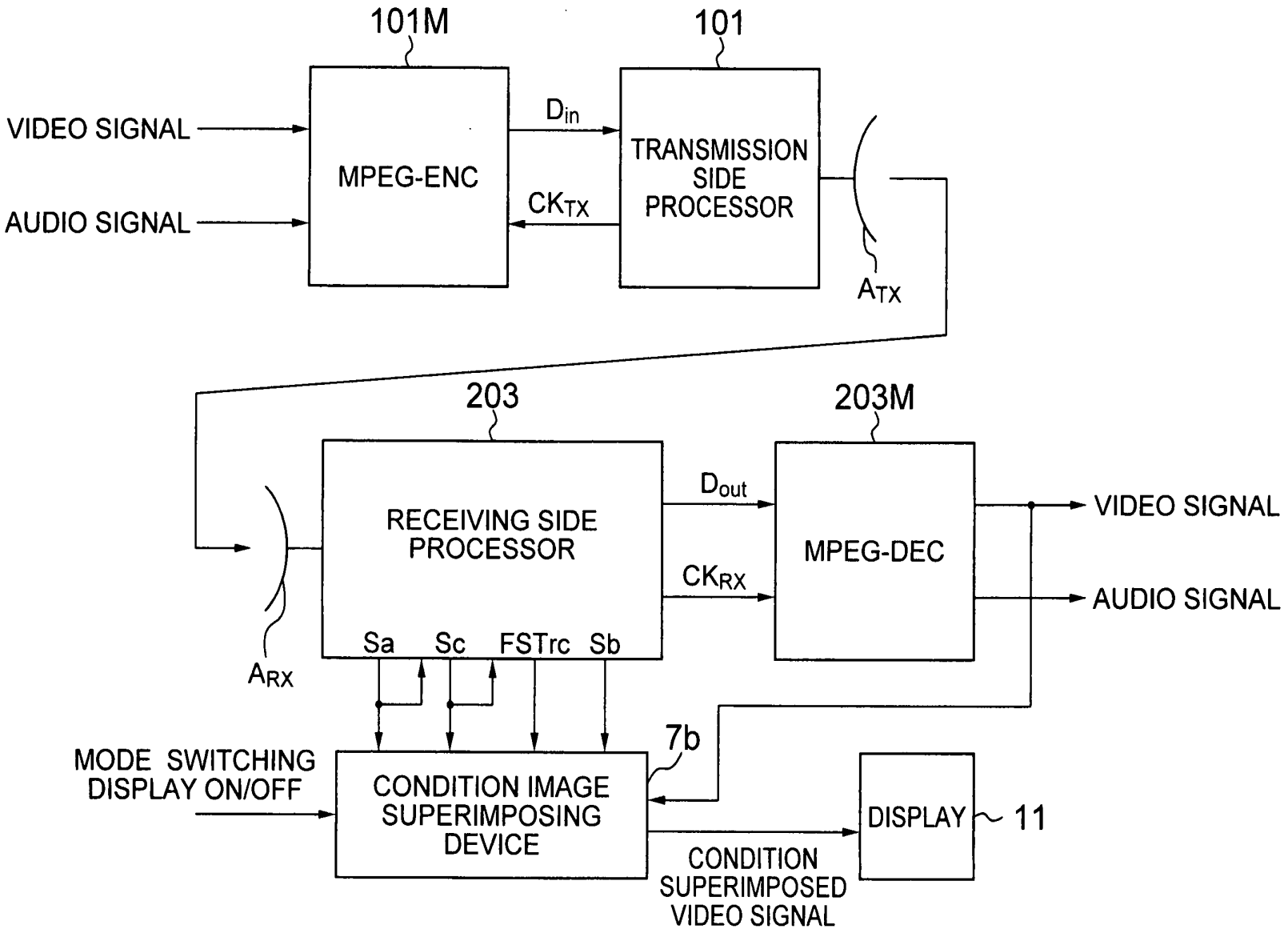

101M
101
VIDEO SIGNAL
AUDIO SIGNAL
MPEG-ENC
Din
CKTX
TRANSMISSION SIDE PROCESSOR
ATX
203
203M
RECEIVING SIDE PROCESSOR
Dout
CKRX
MPEG-DEC
VIDEO SIGNAL
AUDIO SIGNAL
ARX
Sa
Sc
FSTrc
Sb
7b
MODE SWITCHING DISPLAY ON/OFF
CONDITION IMAGE SUPERIMPOSING DEVICE
DISPLAY
11
CONDITION SUPERIMPOSED VIDEO SIGNAL

FIG. 17

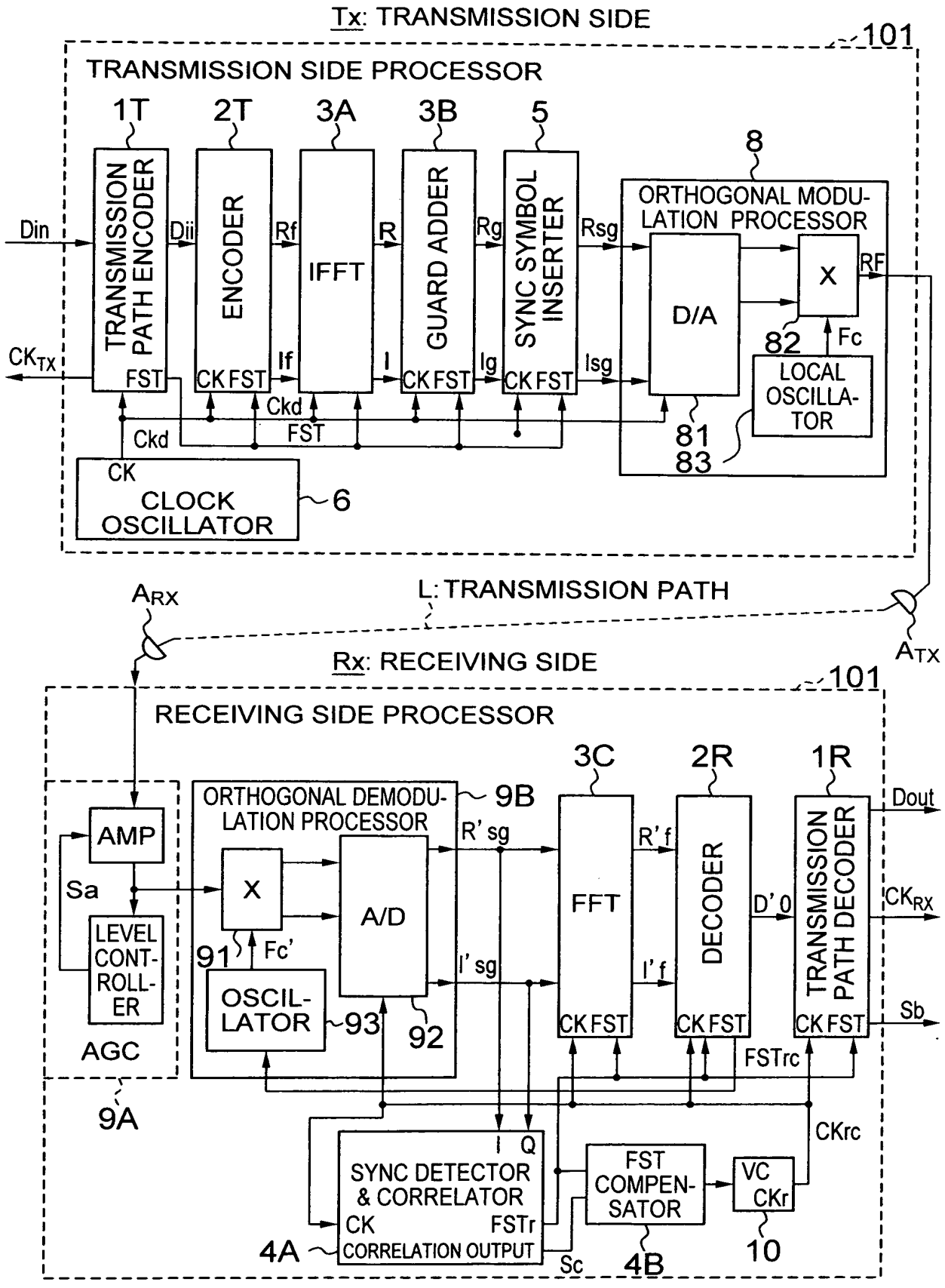

Tx: TRANSMISSION SIDE
101
TRANSMISSION SIDE PROCESSOR
1T
2T
3A
3B
5
8
TRANSMISSION PATH ENCODER
ENCODER
IFFT
GUARD ADDER
SYNC SYMBOL INSERTER
ORTHOGONAL MODULATION PROCESSOR
Din
Dii
Rf
R
Rg
Rsg
D/A
X
RF
82
Fc
LOCAL OSCILLATOR
CKTX
FST
CK FST
If
I
Ig
Isg
Ckd
FST
81
83
CK
CLOCK OSCILLATOR
6
ARX
L: TRANSMISSION PATH
ATX
Rx: RECEIVING SIDE
101
RECEIVING SIDE PROCESSOR
3C
2R
1R
ORTHOGONAL DEMODULATION PROCESSOR
9B
AMP
Sa
LEVEL CONTROLLER
AGC
9A
X
A/D
91
Fc'
OSCILLATOR
93
92
R' sg
I' sg
FFT
R'f
I'f
DECODER
D'0
TRANSMISSION PATH DECODER
Dout
CKRX
Sb
FSTrc
CKrc
I
Q
SYNC DETECTOR & CORRELATOR
CK
FSTr
CORRELATION OUTPUT
4A
Sc
FST COMPENSATOR
4B
VC
CKr
10

FIG. 18

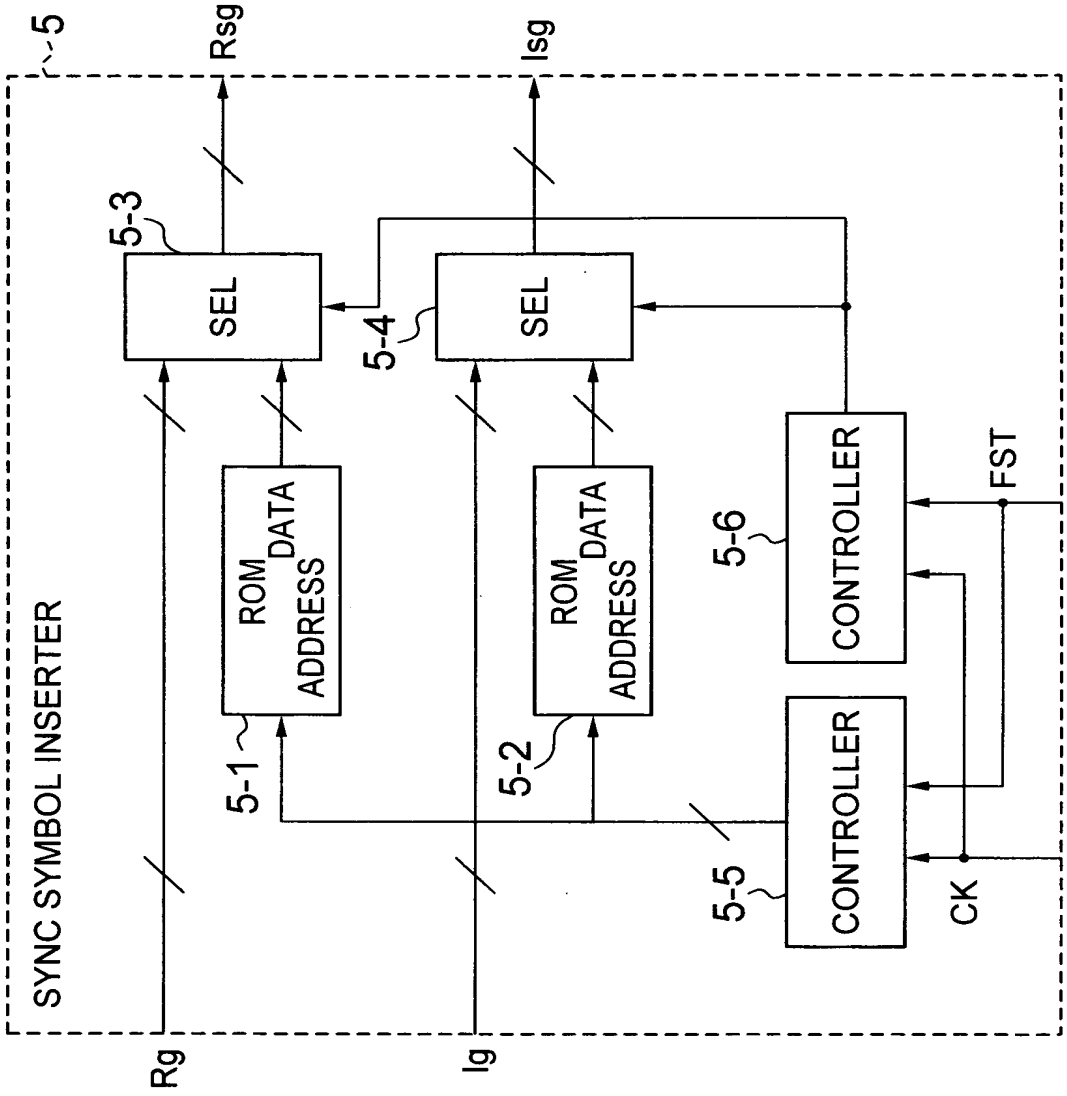

5
SYNC SYMBOL INSERTER
Rg
Ig
Rsg
Isg
5-1
ROM ADDRESS
DATA
5-2
ROM ADDRESS
DATA
5-3
SEL
5-4
SEL
5-5
CONTROLLER
5-6
CONTROLLER
CK
FST

FIG. 19

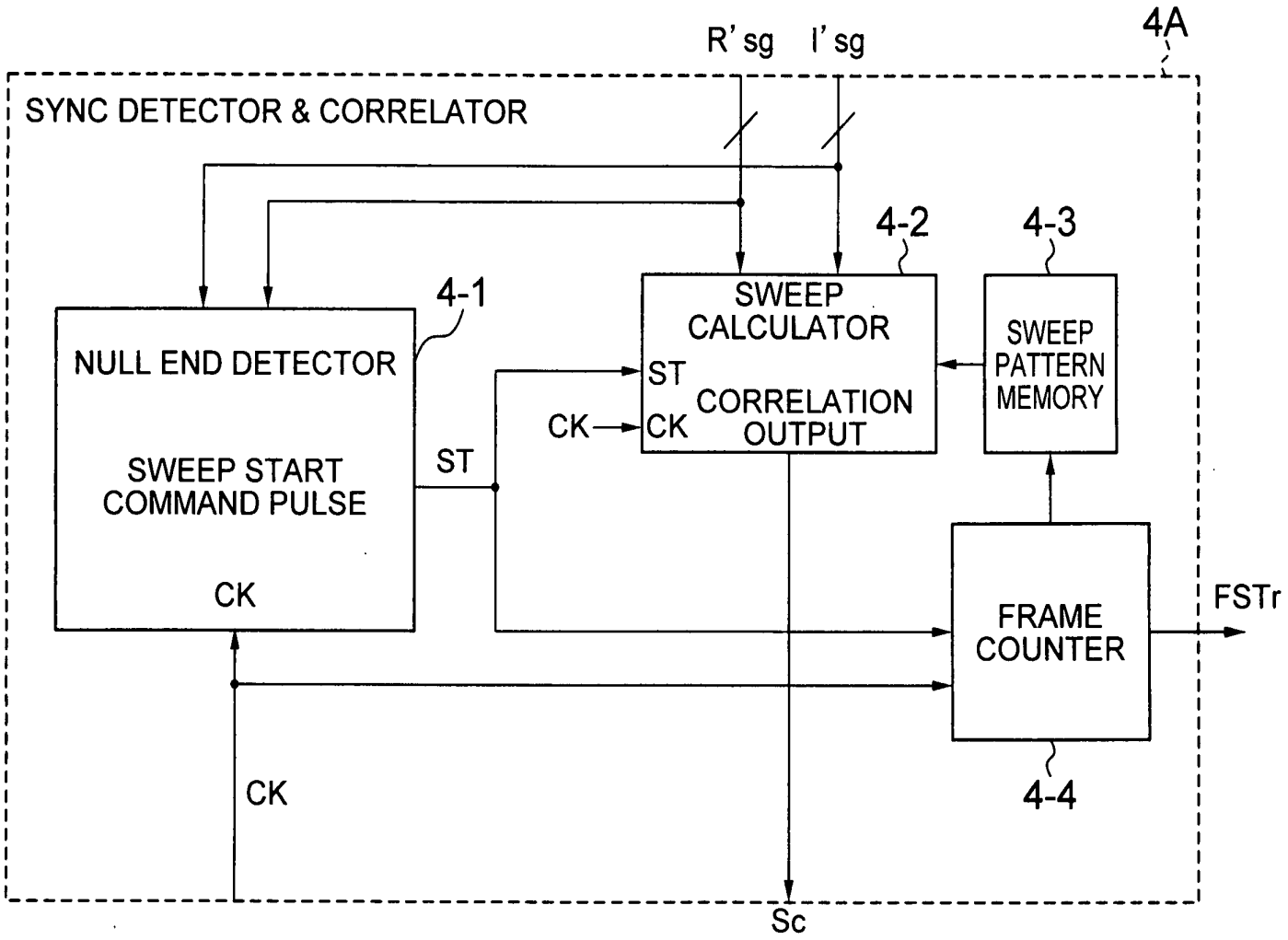

4A
R' sg
I' sg
SYNC DETECTOR & CORRELATOR
4-1
NULL END DETECTOR
SWEEP START COMMAND PULSE
CK
ST
4-2
SWEEP CALCULATOR
ST
CK
CK
CORRELATION OUTPUT
4-3
SWEEP PATTERN MEMORY
FRAME COUNTER
FSTr
4-4
CK
Sc

FIG. 20

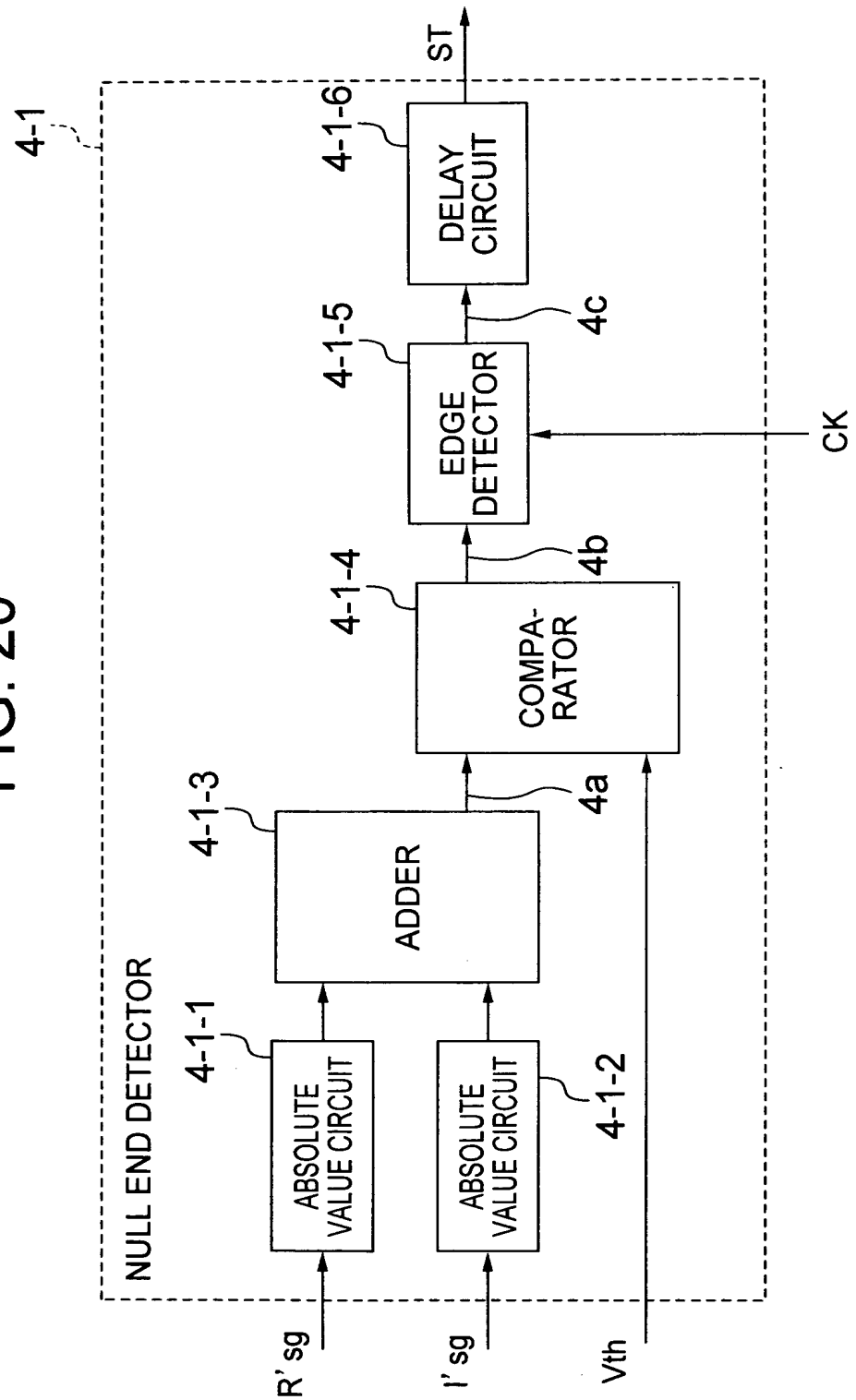

4-1
NULL END DETECTOR
4-1-1
ABSOLUTE VALUE CIRCUIT
4-1-2
ABSOLUTE VALUE CIRCUIT
4-1-3
ADDER
4a
4-1-4
COMPA-RATOR
4b
4-1-5
EDGE DETECTOR
4c
4-1-6
DELAY CIRCUIT
ST
CK
R' sg
I' sg
Vth

FIG. 21

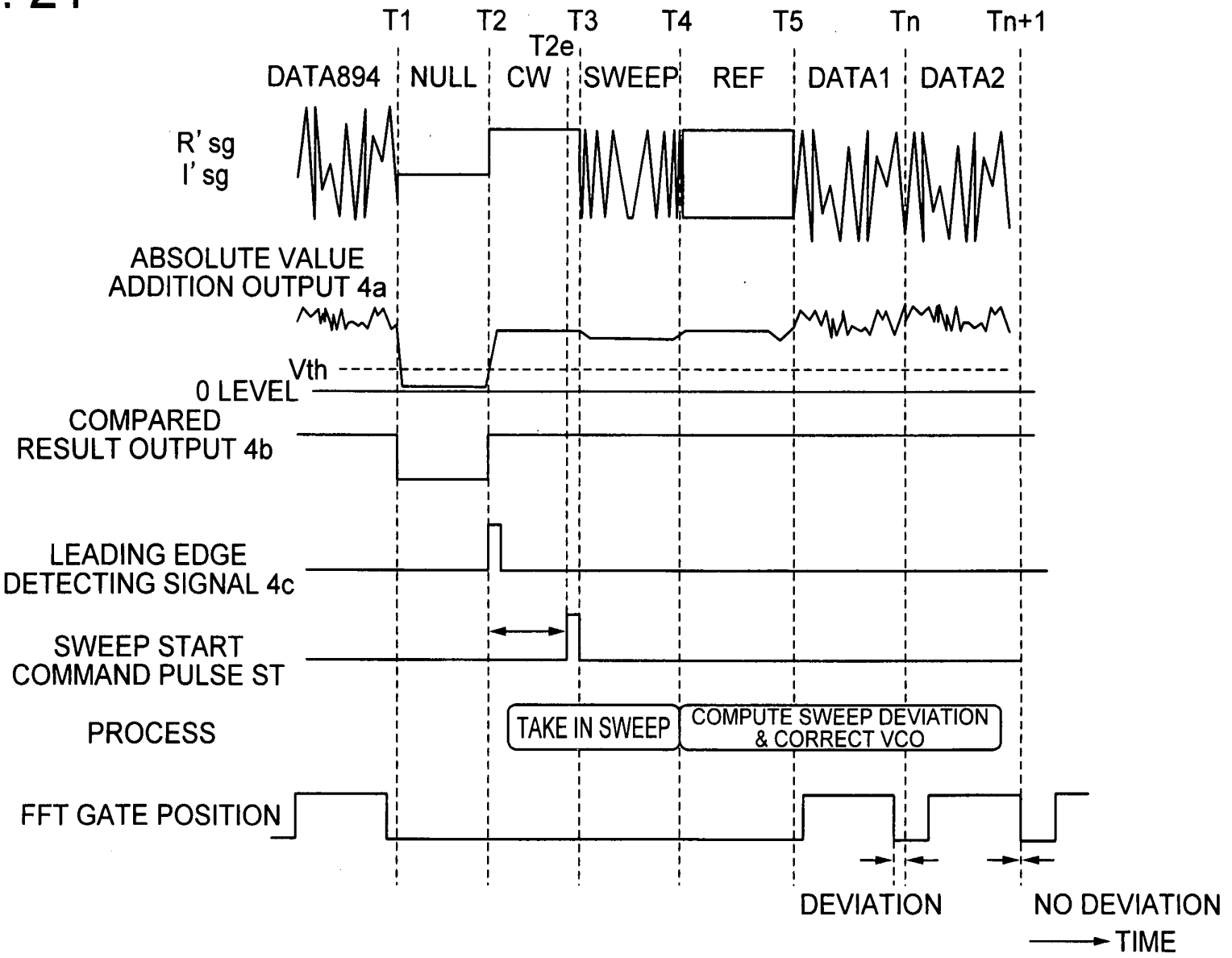

T1
T2
T3
T2e
T4
T5
Tn
Tn+1
DATA894
NULL
CW
SWEEP
REF
DATA1
DATA2
R' sg
I' sg
ABSOLUTE VALUE
ADDITION OUTPUT 4a
Vth
0 LEVEL
COMPARED
RESULT OUTPUT 4b
LEADING EDGE
DETECTING SIGNAL 4c
SWEEP START
COMMAND PULSE ST
PROCESS
TAKE IN SWEEP
COMPUTE SWEEP DEVIATION
& CORRECT VCO
FFT GATE POSITION
DEVIATION
NO DEVIATION
TIME

FIG. 22A

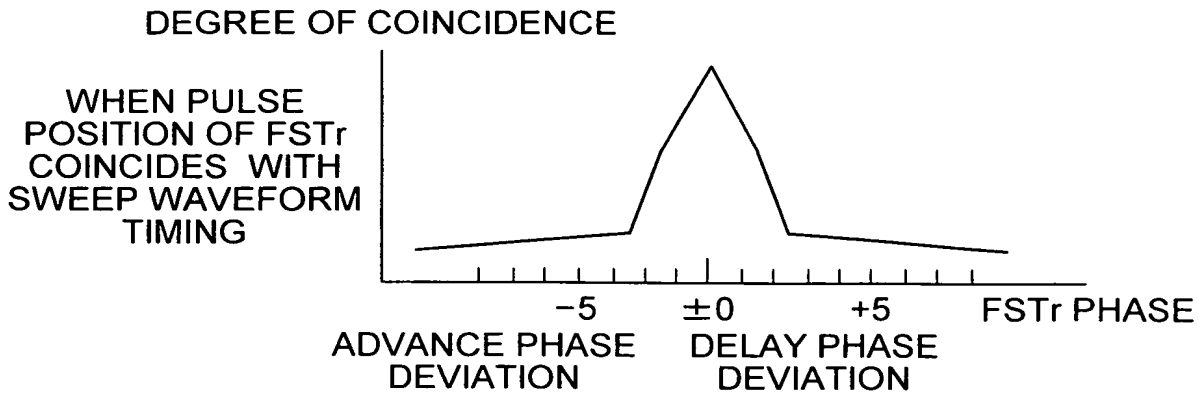


FIG. 22B

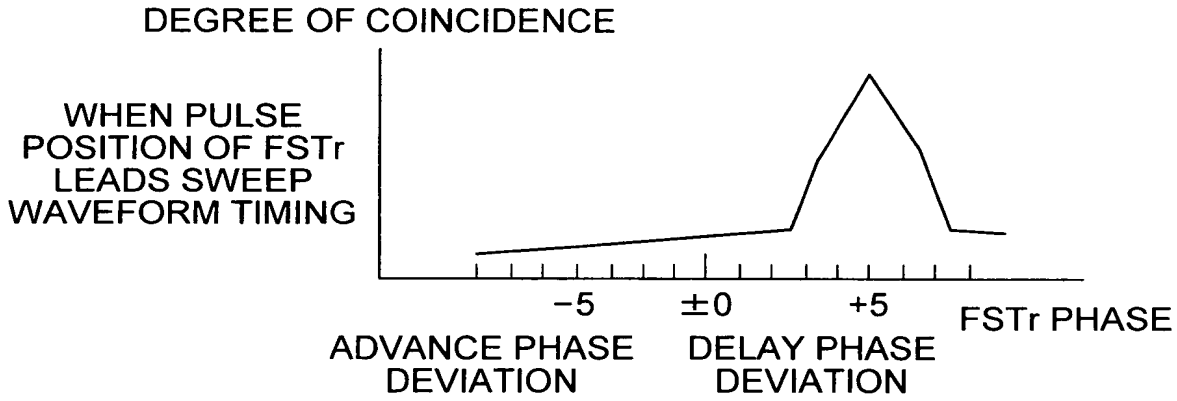


FIG. 22C

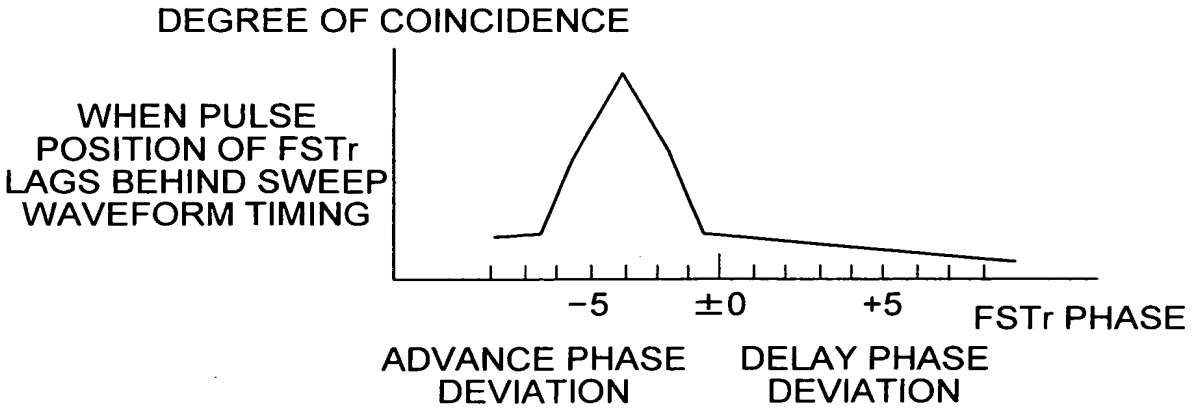


FIG. 23

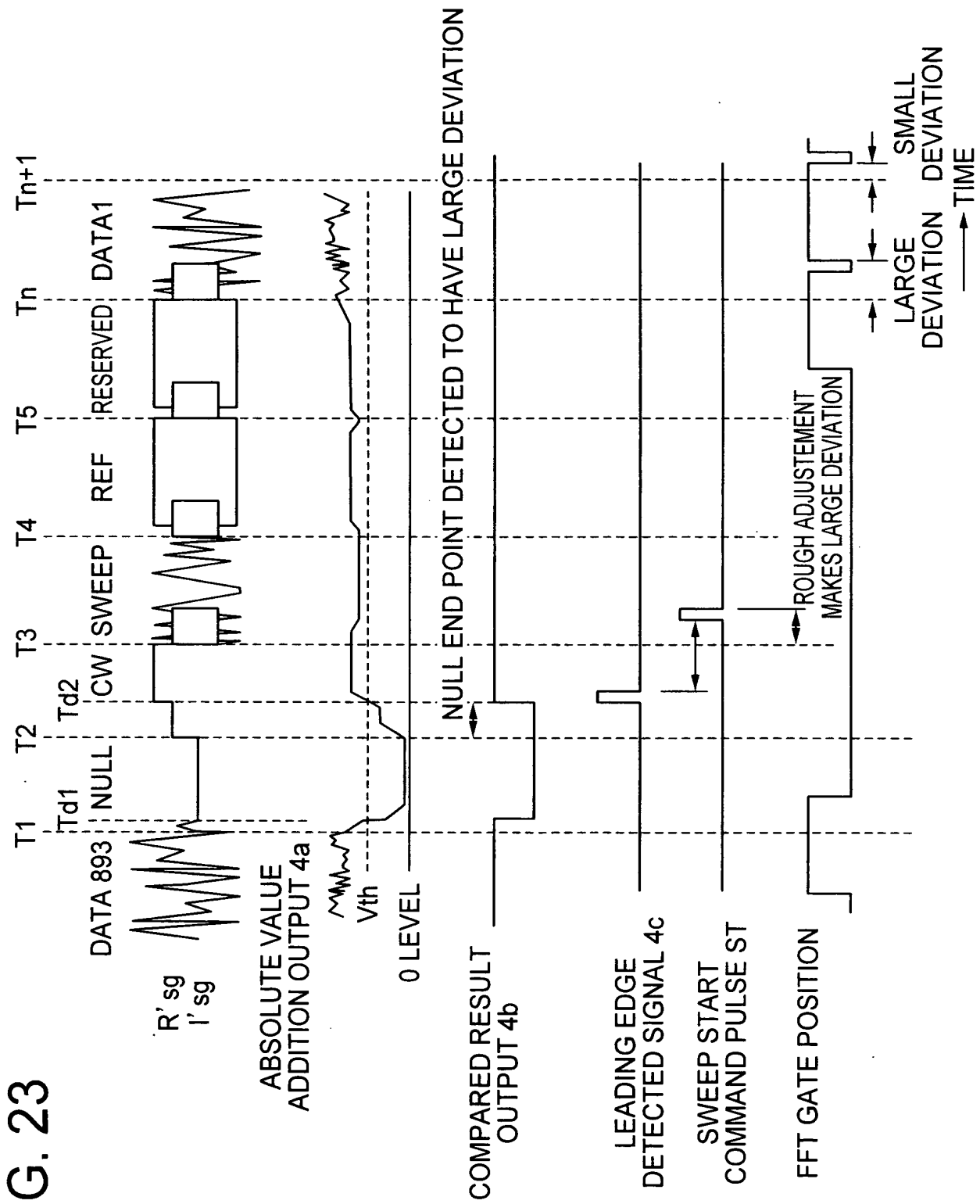

T1
T2
T3
T4
T5
Tn
Tn+1
Td1
Td2
NULL
CW
SWEEP
REF
RESERVED
DATA1
DATA 893
R' sg
I' sg
ABSOLUTE VALUE ADDITION OUTPUT 4a
Vth
0 LEVEL
NULL END POINT DETECTED TO HAVE LARGE DEVIATION
COMPARED RESULT OUTPUT 4b
LEADING EDGE DETECTED SIGNAL 4c
SWEEP START COMMAND PULSE ST
FFT GATE POSITION
ROUGH ADJUSTEMENT MAKES LARGE DEVIATION
LARGE DEVIATION
SMALL DEVIATION
TIME

FIG. 24

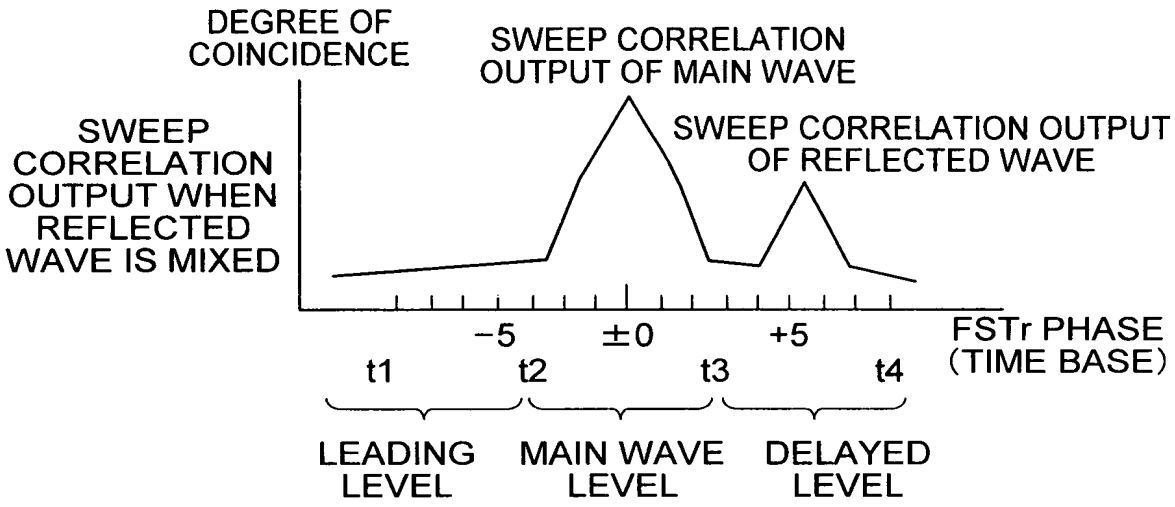

DEGREE OF COINCIDENCE
SWEEP CORRELATION OUTPUT OF MAIN WAVE
SWEEP CORRELATION OUTPUT OF REFLECTED WAVE
SWEEP CORRELATION OUTPUT WHEN REFLECTED WAVE IS MIXED
−5
±0
+5
FSTr PHASE (TIME BASE)
t1
t2
t3
t4
LEADING LEVEL
MAIN WAVE LEVEL
DELAYED LEVEL

FIG. 25

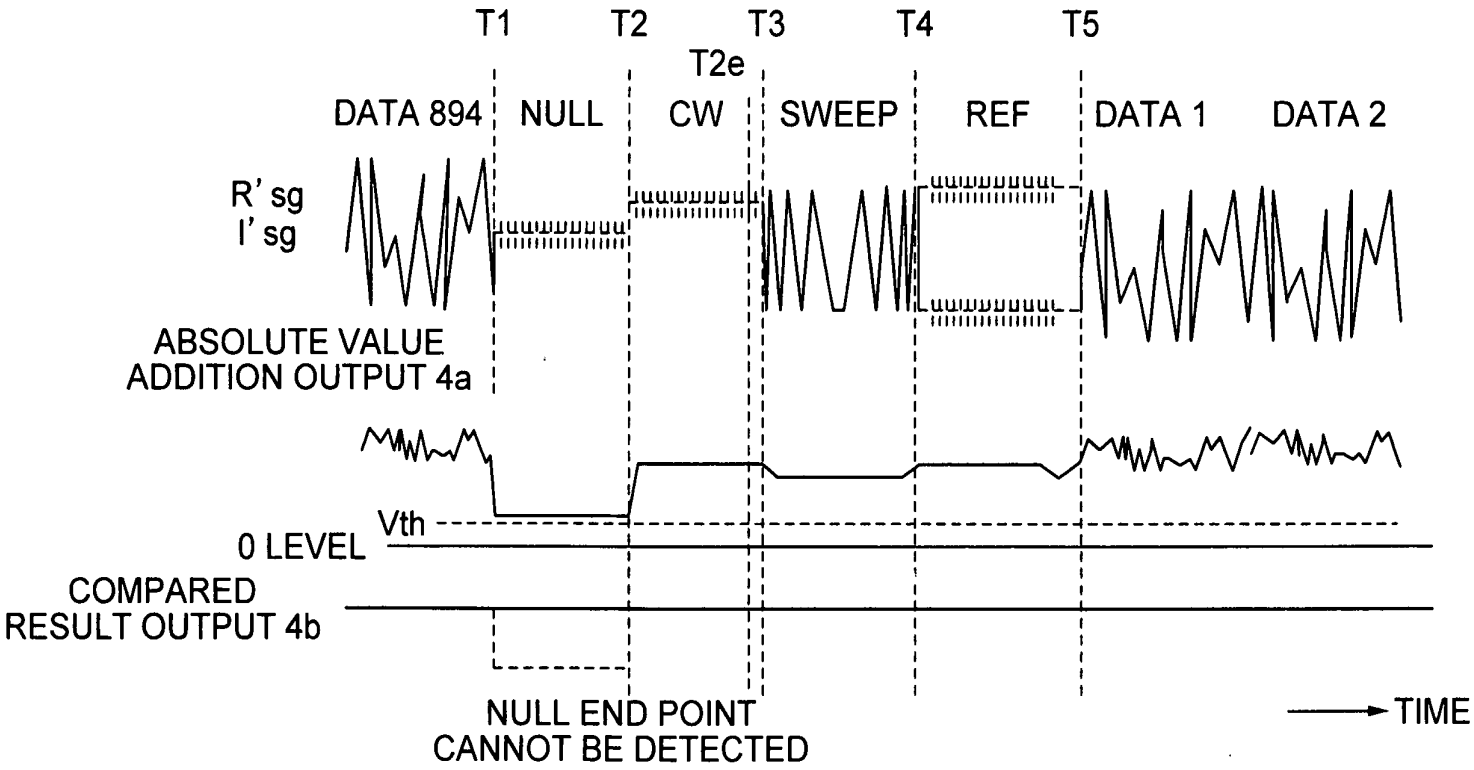

T1
T2
T3
T4
T5
T2e
DATA 894
NULL
CW
SWEEP
REF
DATA 1
DATA 2
R' sg
I' sg
ABSOLUTE VALUE
ADDITION OUTPUT 4a
Vth
0 LEVEL
COMPARED
RESULT OUTPUT 4b
NULL END POINT
CANNOT BE DETECTED
TIME

FIG. 26

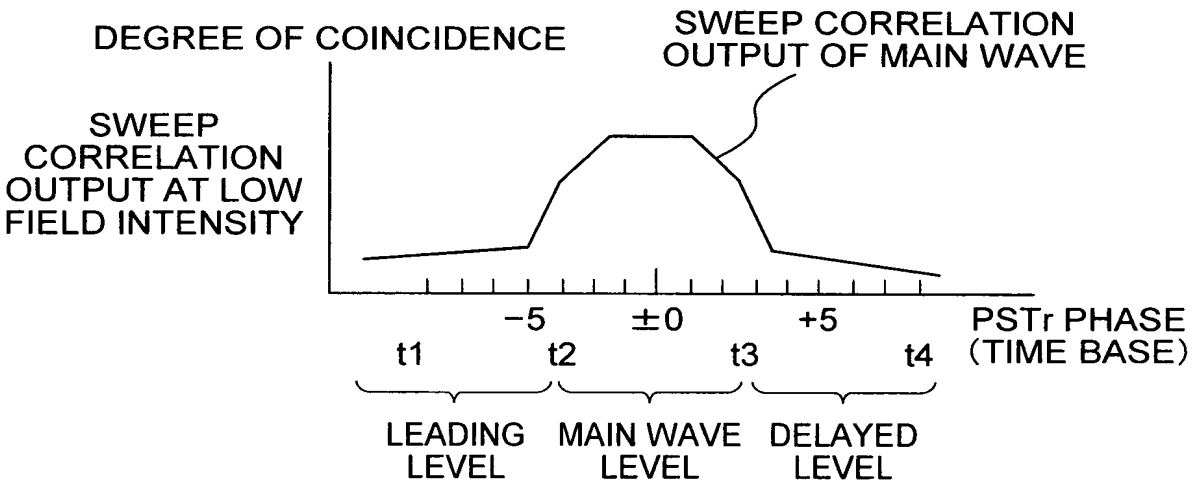

DEGREE OF COINCIDENCE
SWEEP CORRELATION OUTPUT OF MAIN WAVE
SWEEP CORRELATION OUTPUT AT LOW FIELD INTENSITY
−5
±0
+5
PSTr PHASE (TIME BASE)
t1
t2
t3
t4
LEADING LEVEL
MAIN WAVE LEVEL
DELAYED LEVEL

FIG. 27

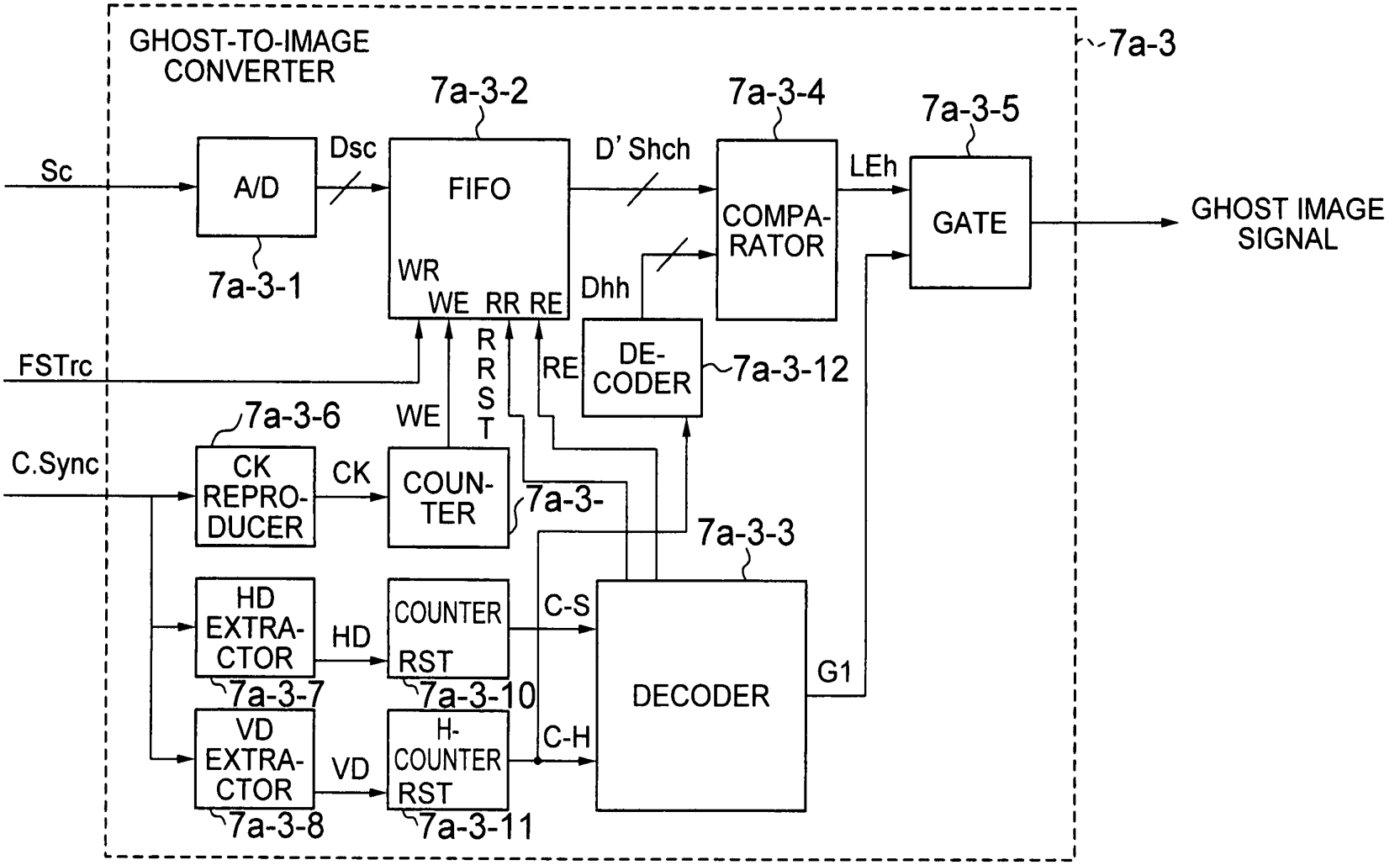

GHOST-TO-IMAGE CONVERTER
7a-3
Sc
A/D
Dsc
7a-3-1
FIFO
7a-3-2
WR
WE
RR
RE
D' Shch
Dhh
COMPA-RATOR
7a-3-4
LEh
GATE
7a-3-5
GHOST IMAGE SIGNAL
FSTrc
RRST
RE
DE-CODER
7a-3-12
7a-3-6
WE
C.Sync
CK REPRO-DUCER
CK
COUN-TER
7a-3-
7a-3-3
HD EXTRA-CTOR
HD
7a-3-7
COUNTER
RST
7a-3-10
C-S
DECODER
G1
VD EXTRA-CTOR
VD
7a-3-8
H-COUNTER
RST
7a-3-11
C-H

FIG. 28

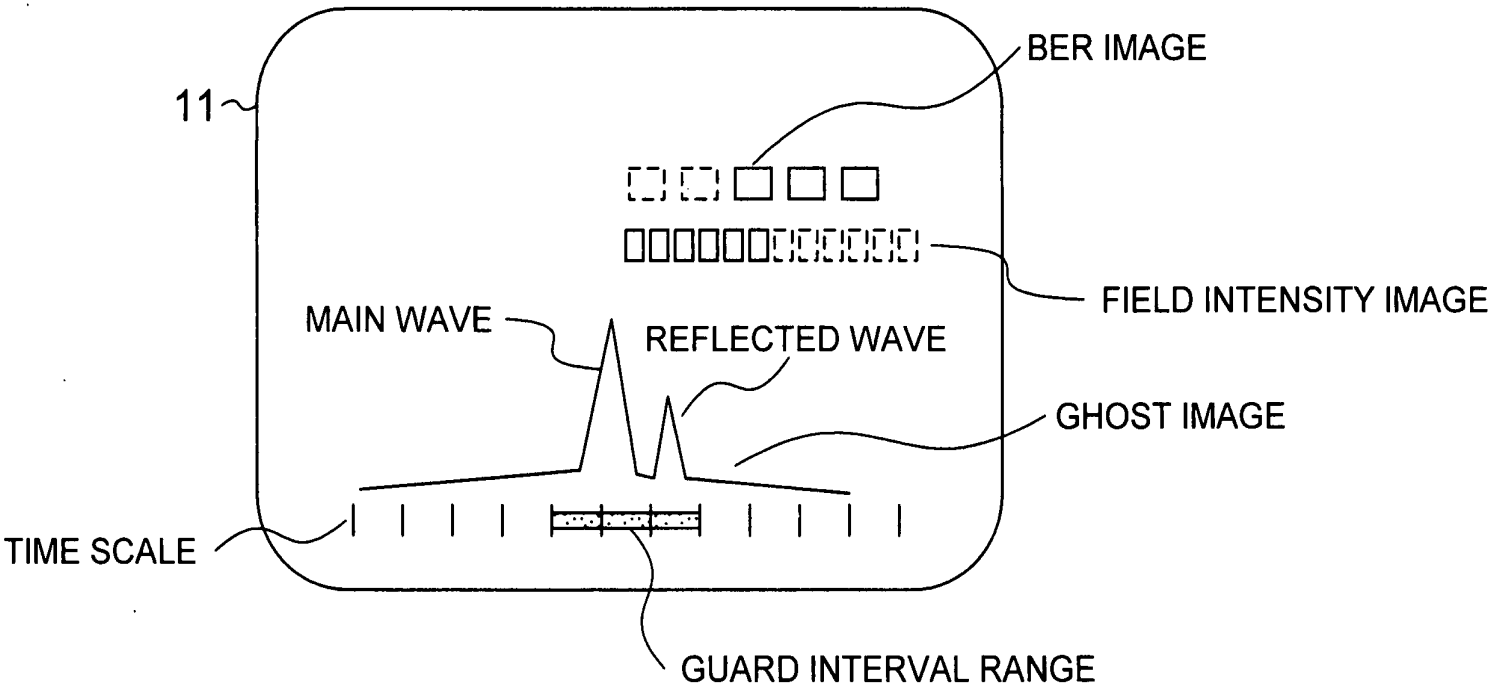

11
BER IMAGE
FIELD INTENSITY IMAGE
MAIN WAVE
REFLECTED WAVE
GHOST IMAGE
TIME SCALE
GUARD INTERVAL RANGE

FIG. 29

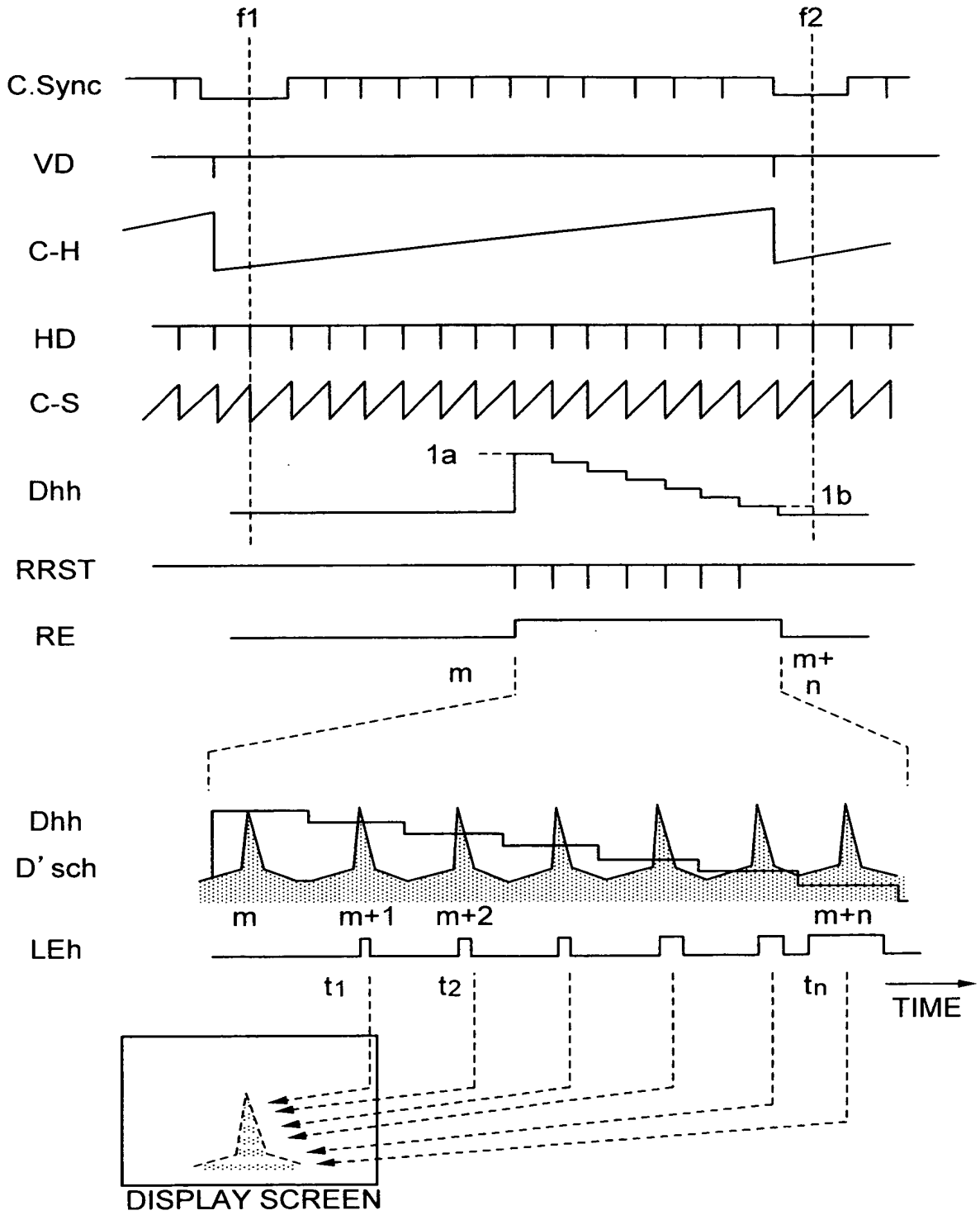

f1
f2
C.Sync
VD
C-H
HD
C-S
1a
Dhh
1b
RRST
RE
m
m+
n
Dhh
D' sch
m
m+1
m+2
m+n
LEh
t1
t2
tn
TIME
DISPLAY SCREEN

FIG. 30

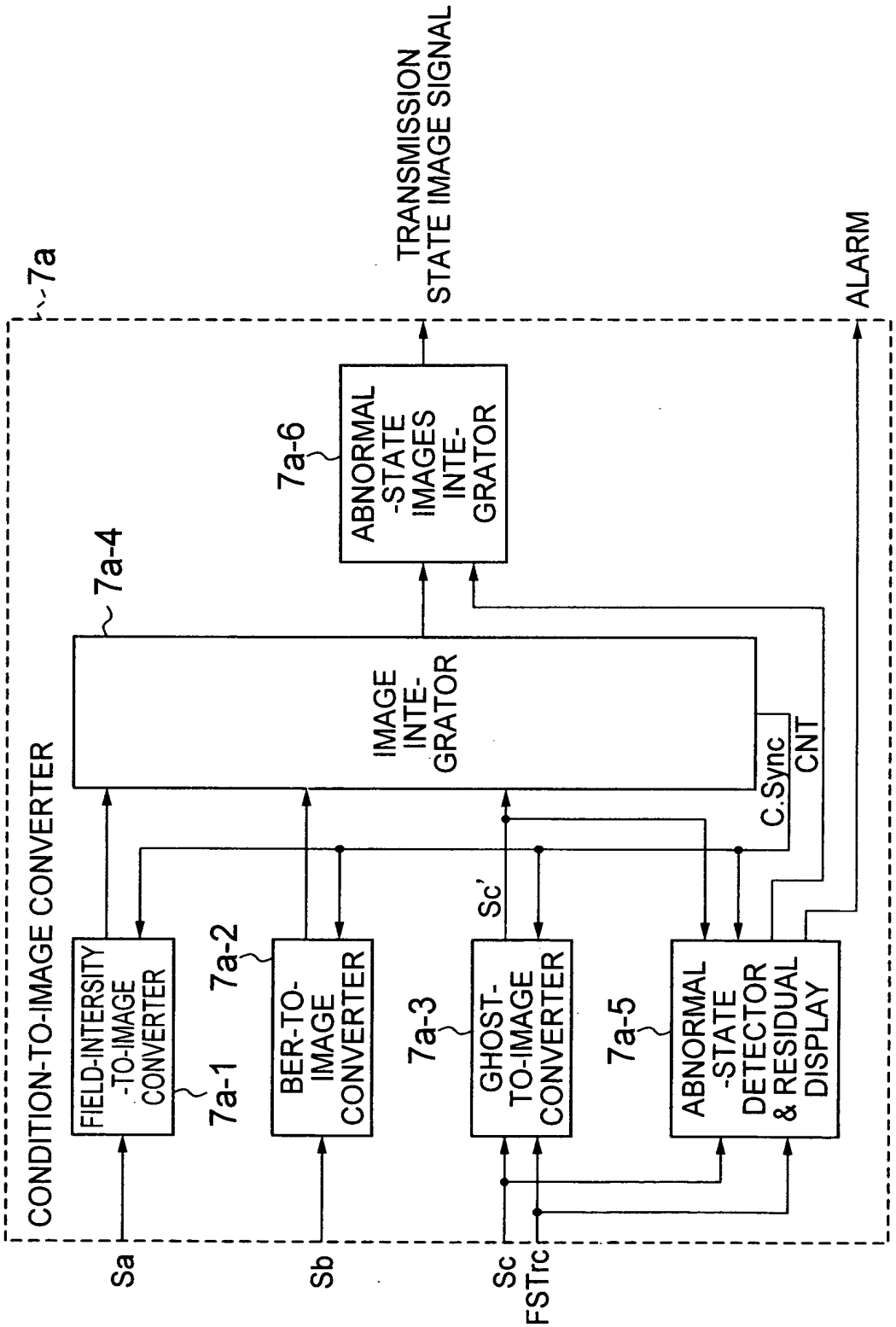

7a
CONDITION-TO-IMAGE CONVERTER
TRANSMISSION STATE IMAGE SIGNAL
ALARM
7a-6
ABNORMAL -STATE IMAGES INTE- GRATOR
7a-4
IMAGE INTE- GRATOR
C.Sync
CNT
FIELD-INTERSITY -TO-IMAGE CONVERTER
7a-1
7a-2
BER-TO- IMAGE CONVERTER
7a-3
Sc'
GHOST- TO-IMAGE CONVERTER
7a-5
ABNORMAL -STATE DETECTOR & RESIDUAL DISPLAY
Sa
Sb
Sc
FSTrc

FIG. 31

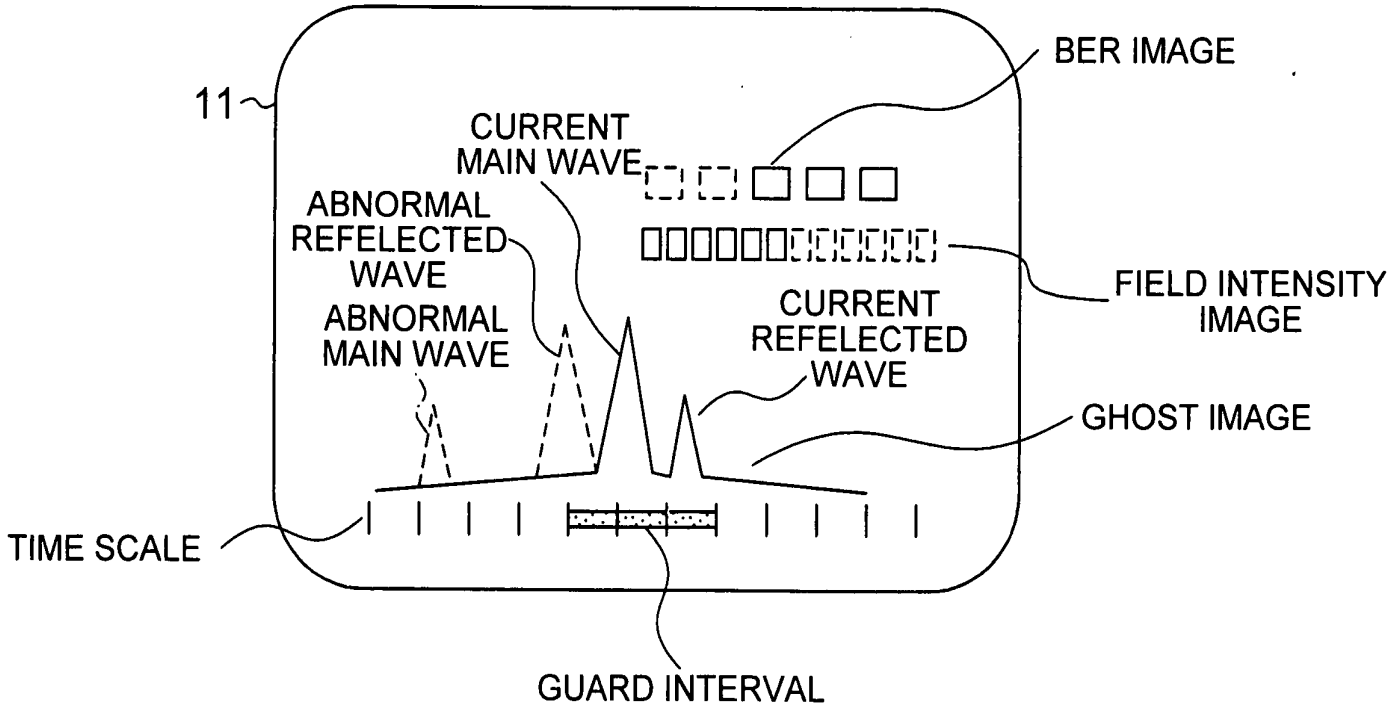

11
BER IMAGE
CURRENT MAIN WAVE
ABNORMAL REFELECTED WAVE
ABNORMAL MAIN WAVE
FIELD INTENSITY IMAGE
CURRENT REFELECTED WAVE
GHOST IMAGE
TIME SCALE
GUARD INTERVAL

FIG. 32

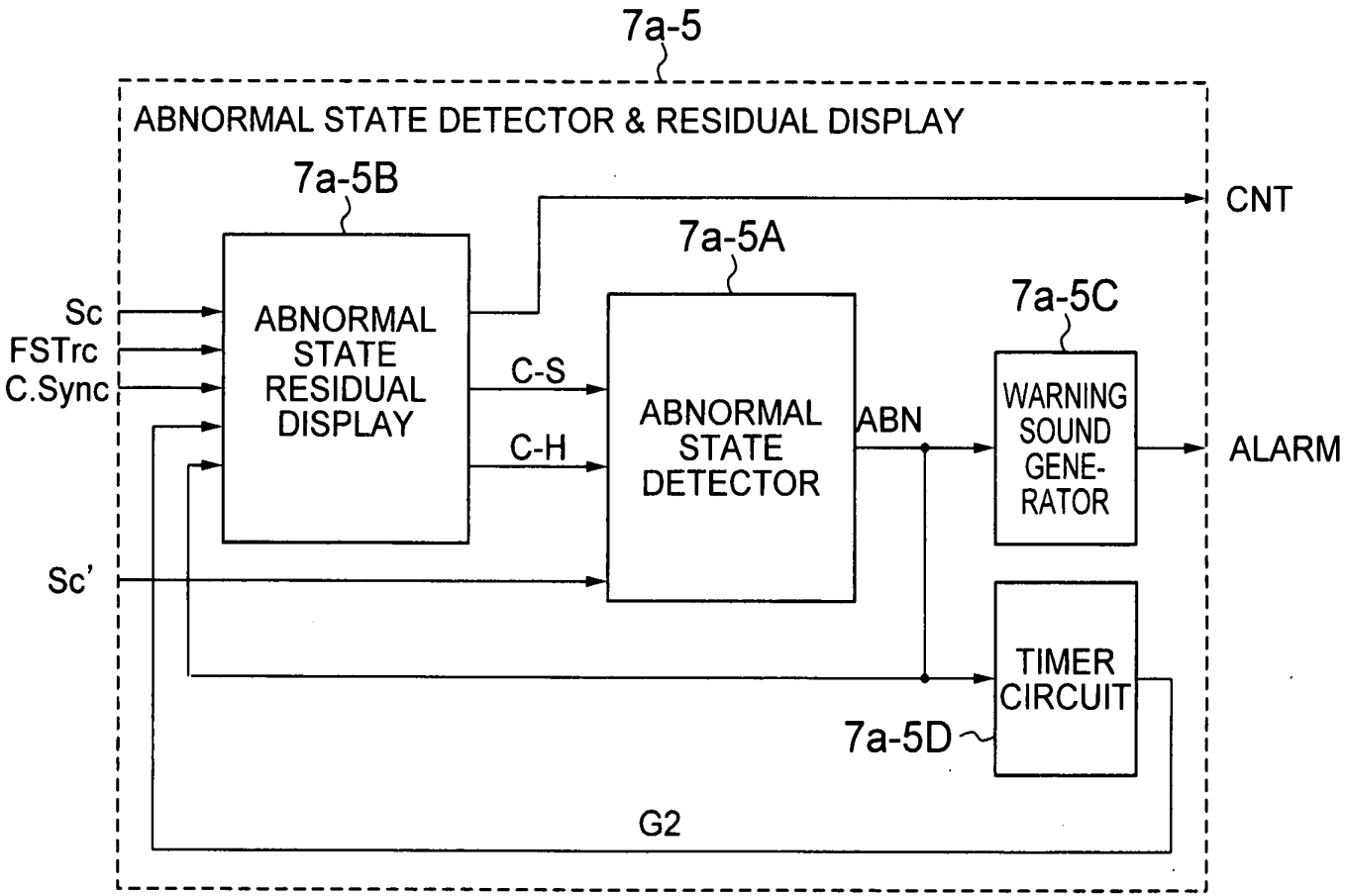

7a-5
ABNORMAL STATE DETECTOR & RESIDUAL DISPLAY
7a-5B
7a-5A
7a-5C
CNT
Sc
FSTrc
C.Sync
ABNORMAL STATE RESIDUAL DISPLAY
C-S
C-H
ABNORMAL STATE DETECTOR
ABN
WARNING SOUND GENE-RATOR
ALARM
Sc'
TIMER CIRCUIT
7a-5D
G2

FIG. 33

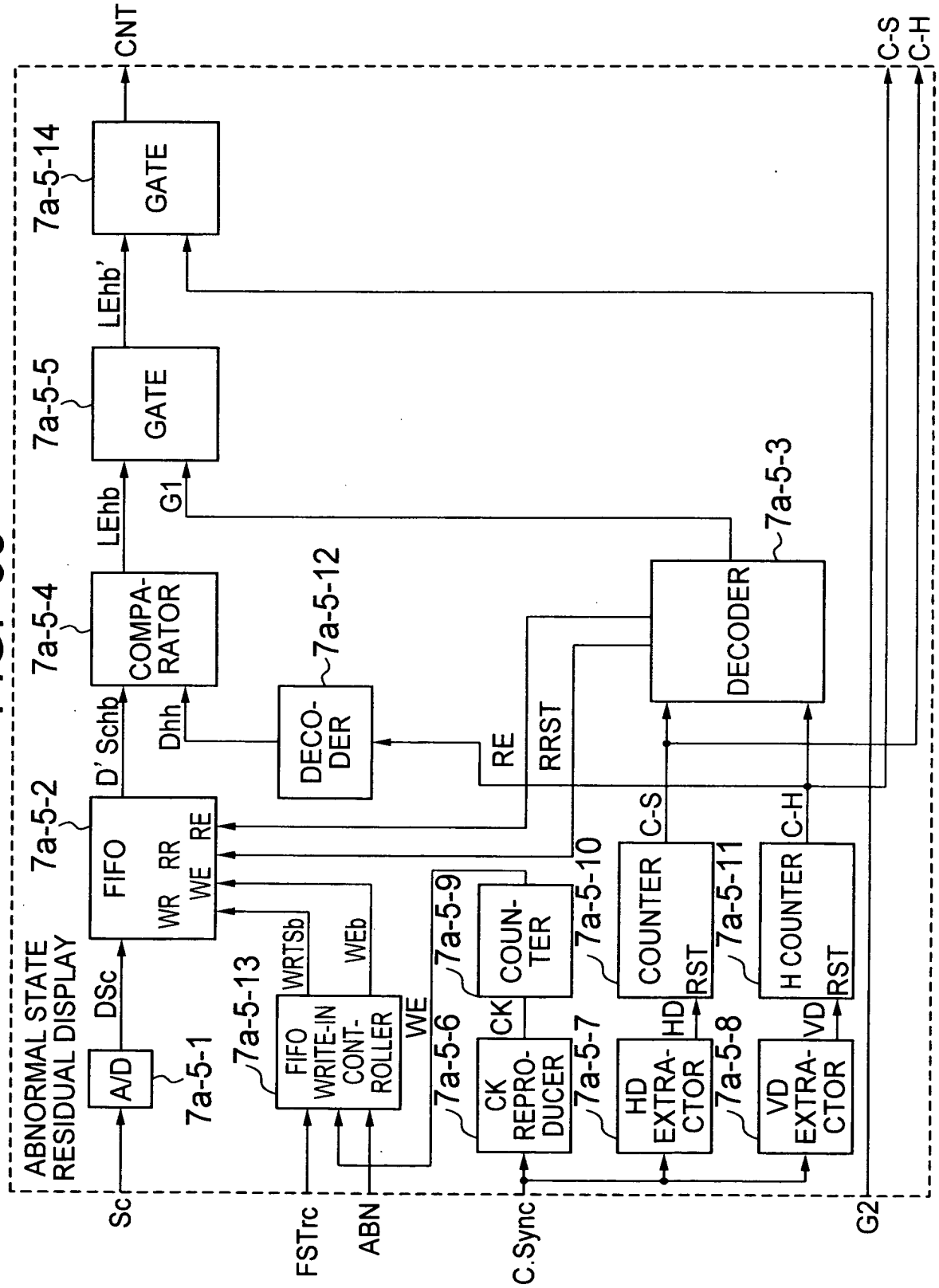

ABNORMAL STATE RESIDUAL DISPLAY
A/D
7a-5-1
DSc
FIFO
WR RR WE RE
7a-5-2
D' Schb
COMPA-RATOR
7a-5-4
LEhb
GATE
7a-5-5
LEhb'
GATE
7a-5-14
CNT
DECO-DER
7a-5-12
Dhh
RE
RRST
G1
DECODER
7a-5-3
FIFO WRITE-IN CONT-ROLLER
7a-5-13
WRTSb
WEb
WE
CK REPRO-DUCER
7a-5-7
CK
COUN-TER
7a-5-9
7a-5-10
COUNTER
RST
7a-5-11
C-S
H COUNTER
RST
C-H
HD EXTRA-CTOR
7a-5-8
HD
VD EXTRA-CTOR
VD
Sc
FSTrc
ABN
C.Sync
G2
C-S
C-H

FIG. 34

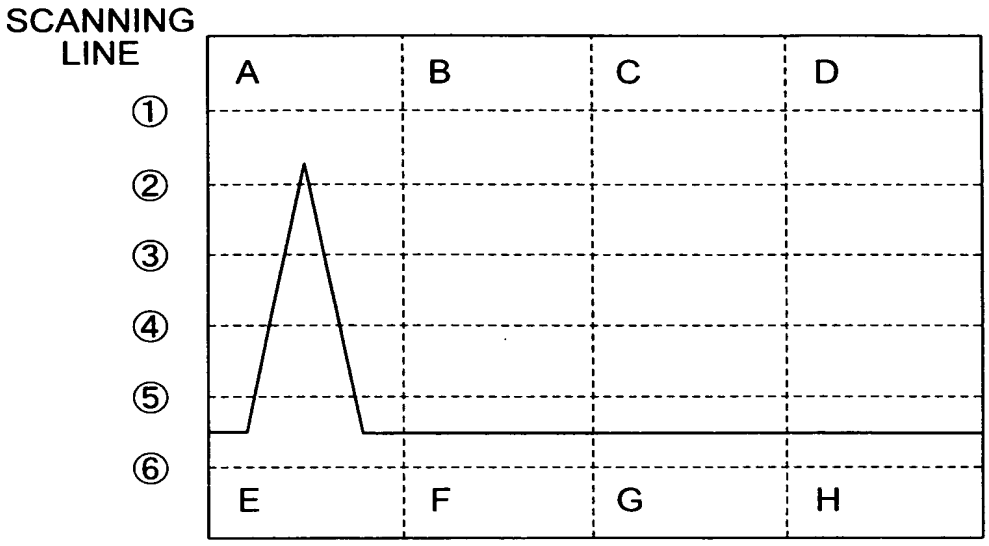

SCANNING LINE
A
B
C
D
①
②
③
④
⑤
⑥
E
F
G
H

FIG. 35

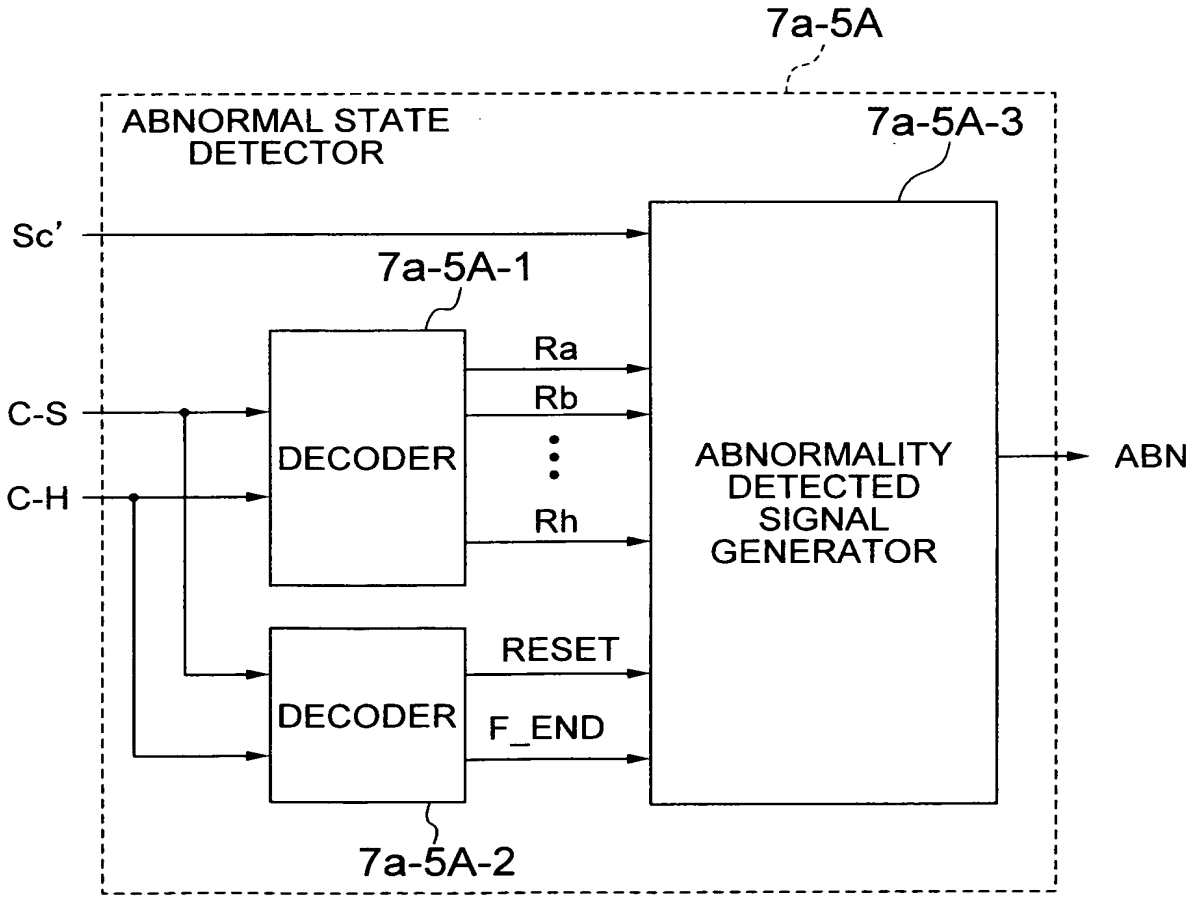

7a-5A
ABNORMAL STATE DETECTOR
7a-5A-3
Sc'
7a-5A-1
C-S
C-H
DECODER
Ra
Rb
Rh
ABNORMALITY DETECTED SIGNAL GENERATOR
ABN
DECODER
RESET
F_END
7a-5A-2

FIG. 36

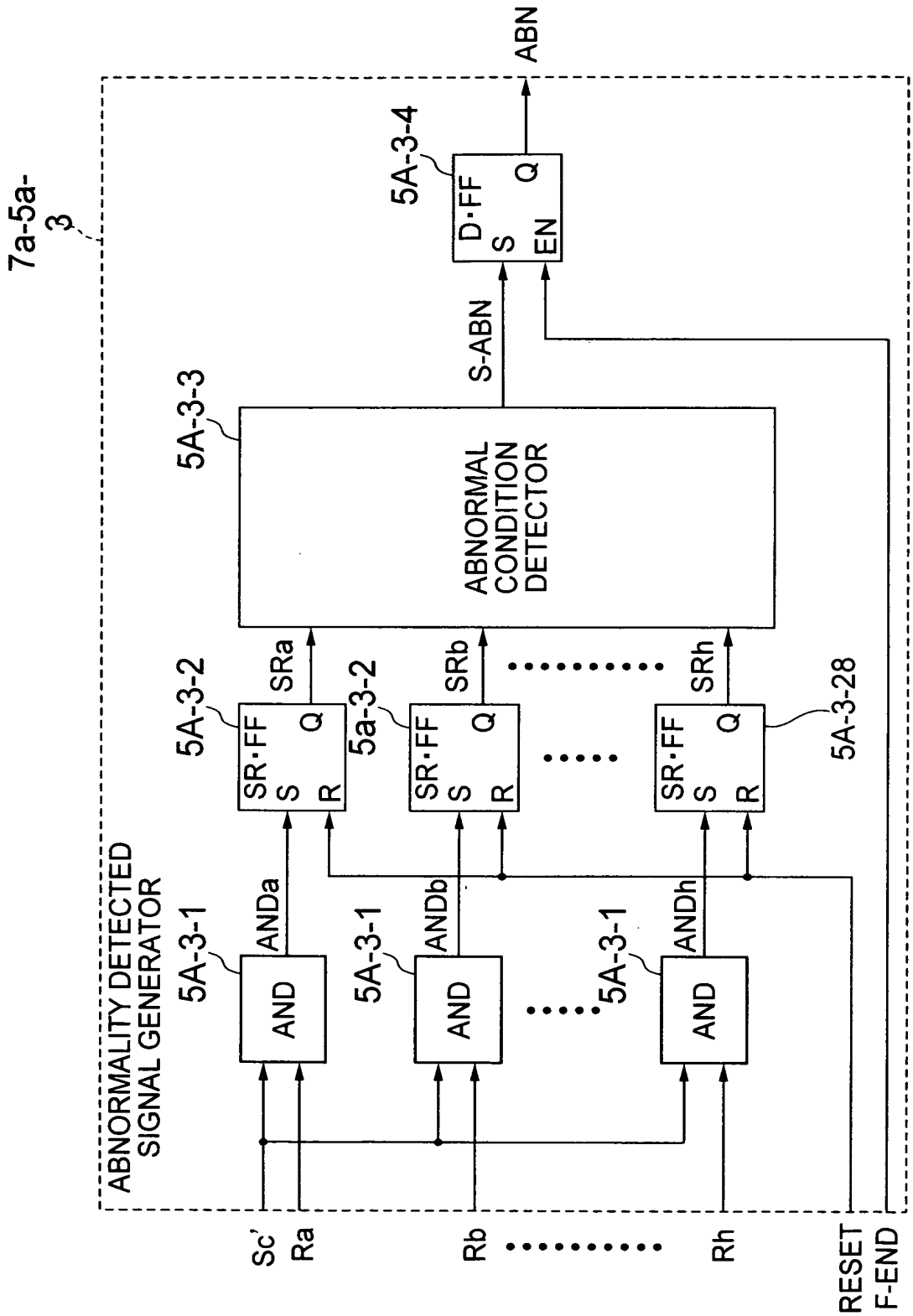

7a-5a-3
ABNORMALITY DETECTED SIGNAL GENERATOR
5A-3-1
AND
ANDa
ANDb
ANDh
5A-3-2
5a-3-2
5A-3-28
SR·FF
S
R
Q
SRa
SRb
SRh
5A-3-3
ABNORMAL CONDITION DETECTOR
S-ABN
5A-3-4
D·FF
EN
ABN
Sc'
Ra
Rb
Rh
RESET
F-END

FIG. 37

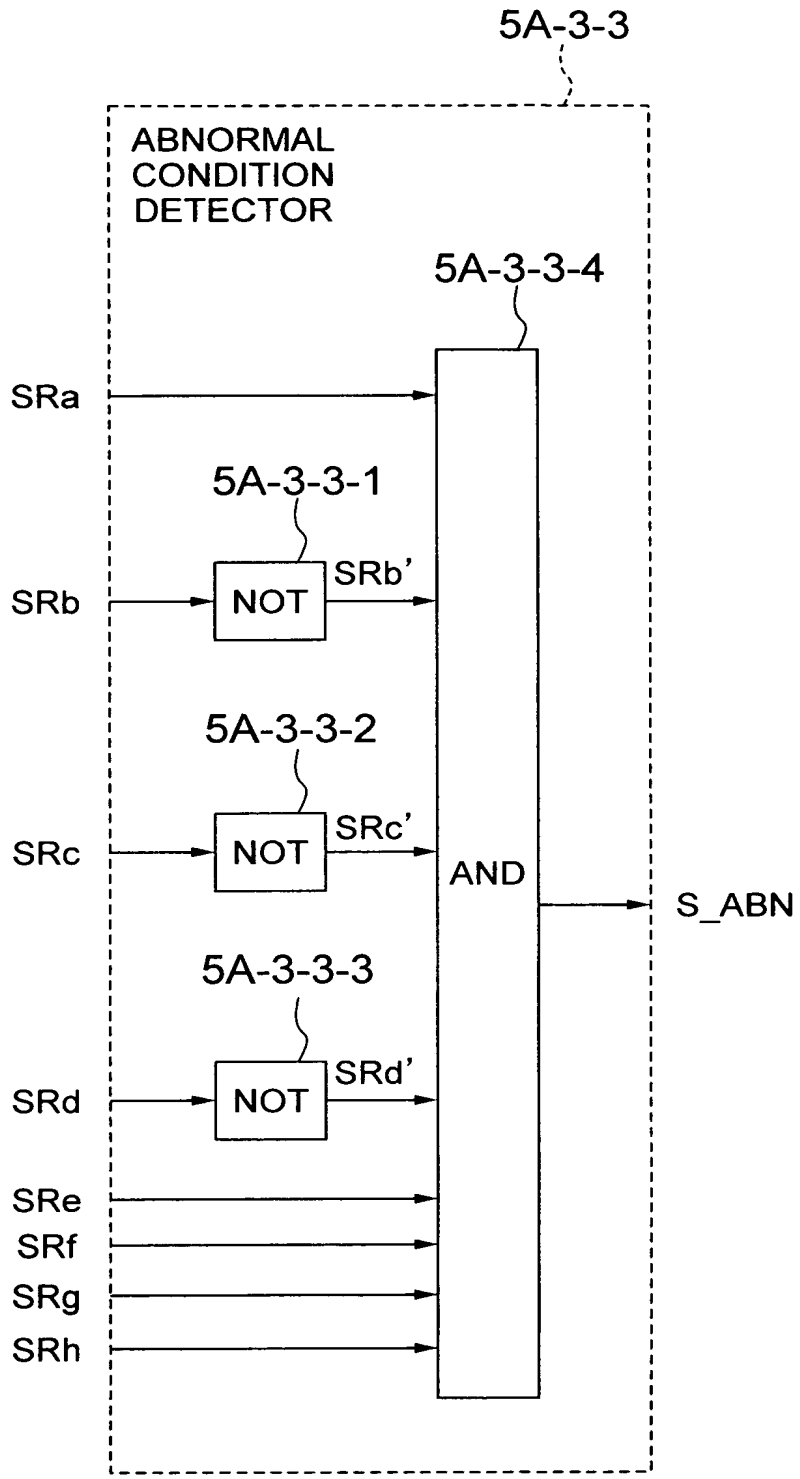

5A-3-3
ABNORMAL CONDITION DETECTOR
5A-3-3-4
SRa
5A-3-3-1
SRb
NOT
SRb'
5A-3-3-2
SRc
NOT
SRc'
AND
S_ABN
5A-3-3-3
SRd
NOT
SRd'
SRe
SRf
SRg
SRh

FIG. 38

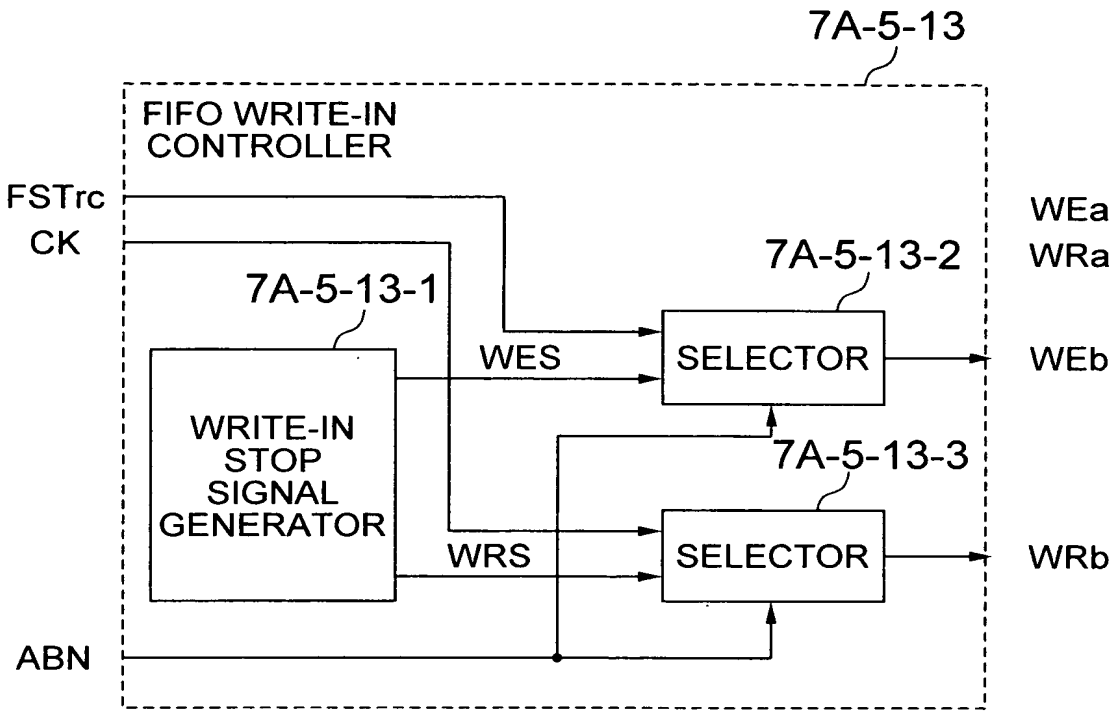

7A-5-13
FIFO WRITE-IN CONTROLLER
FSTrc
CK
ABN
7A-5-13-1
WRITE-IN STOP SIGNAL GENERATOR
WES
WRS
7A-5-13-2
SELECTOR
7A-5-13-3
SELECTOR
WEa
WRa
WEb
WRb

FIG. 39

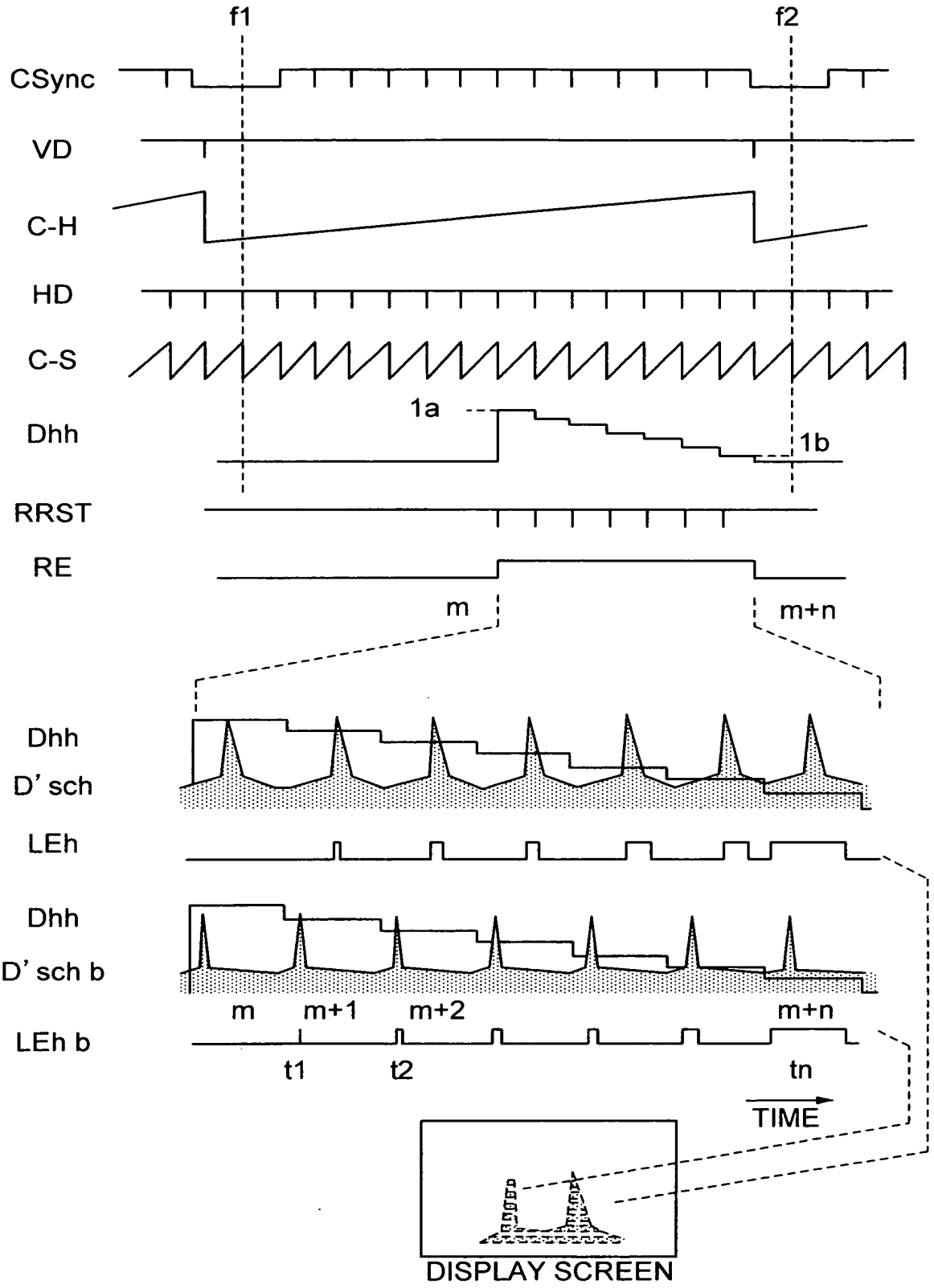

f1
f2
CSync
VD
C-H
HD
C-S
Dhh
1a
1b
RRST
RE
m
m+n
Dhh
D' sch
LEh
Dhh
D' sch b
m
m+1
m+2
m+n
LEh b
t1
t2
tn
TIME
DISPLAY SCREEN

FIG. 40

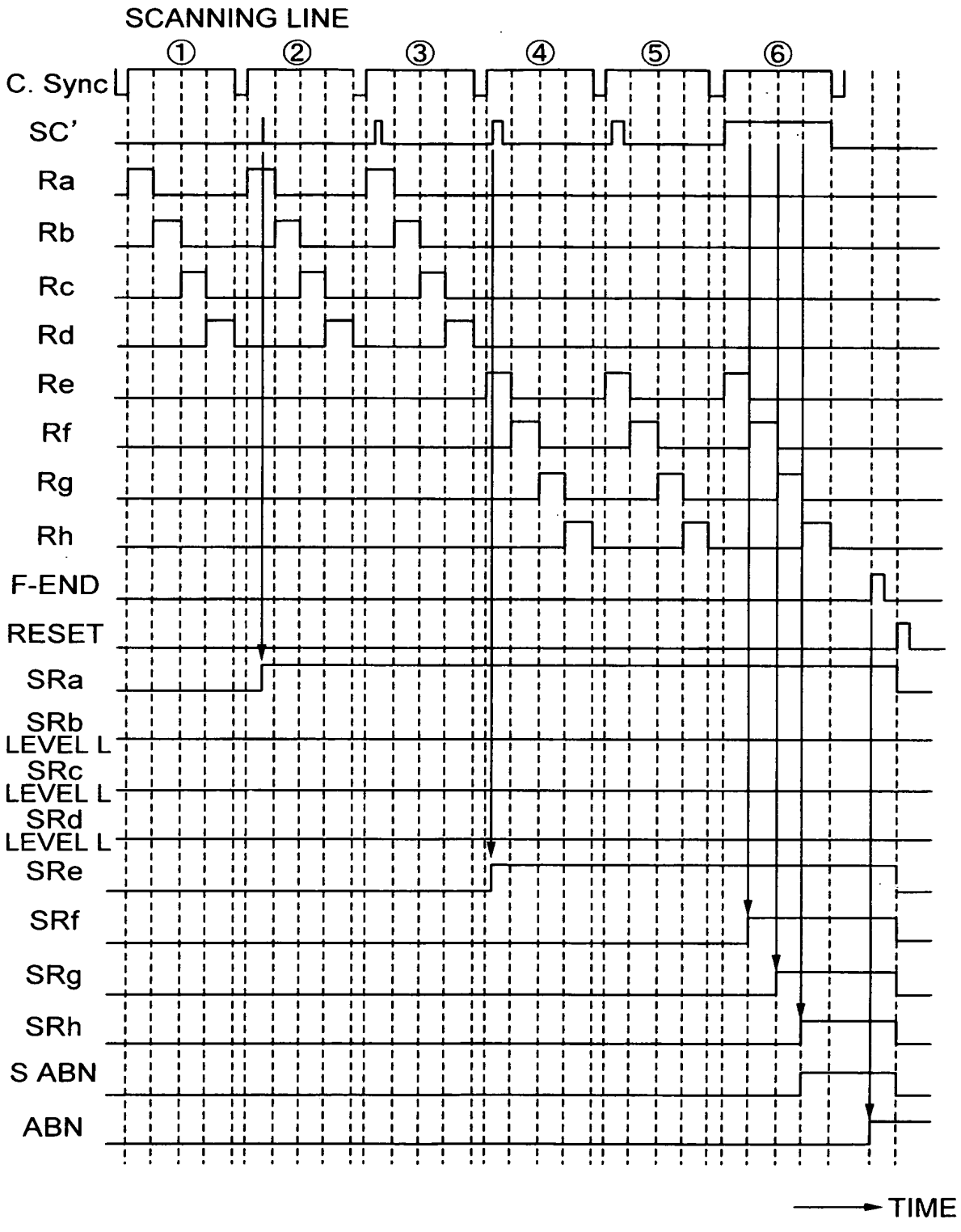

SCANNING LINE
①
②
③
④
⑤
⑥
C. Sync
SC'
Ra
Rb
Rc
Rd
Re
Rf
Rg
Rh
F-END
RESET
SRa
SRb
LEVEL L
SRc
LEVEL L
SRd
LEVEL L
SRe
SRf
SRg
SRh
S ABN
ABN
TIME

FIG. 41

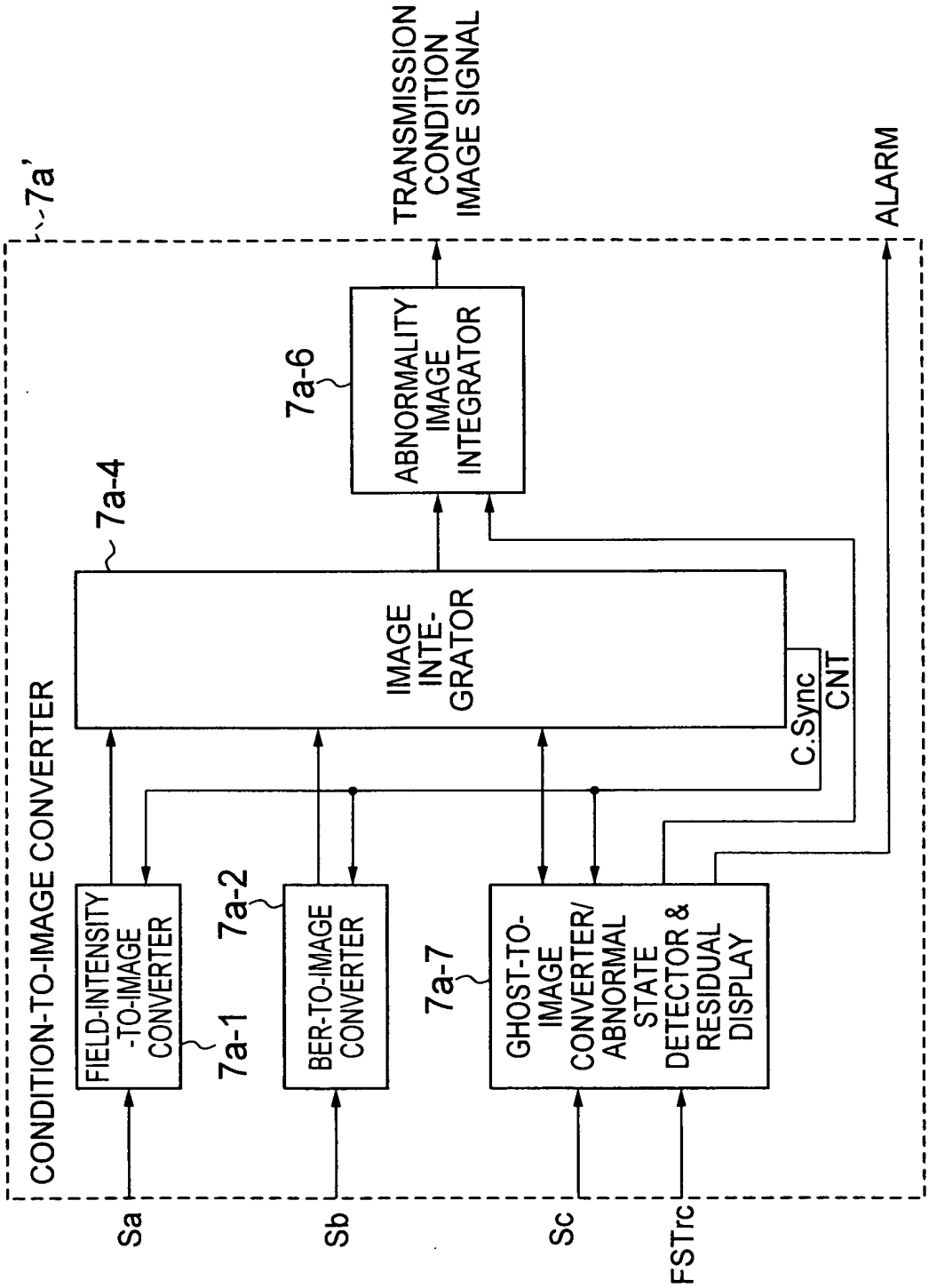

CONDITION-TO-IMAGE CONVERTER
7a'
TRANSMISSION CONDITION IMAGE SIGNAL
ALARM
7a-6
ABNORMALITY IMAGE INTEGRATOR
7a-4
IMAGE INTE-GRATOR
C.Sync
CNT
FIELD-INTENSITY -TO-IMAGE CONVERTER
7a-1
7a-2
BER-TO-IMAGE CONVERTER
7a-7
GHOST-TO-IMAGE CONVERTER/ ABNORMAL STATE DETECTOR & RESIDUAL DISPLAY
Sa
Sb
Sc
FSTrc

FIG. 42

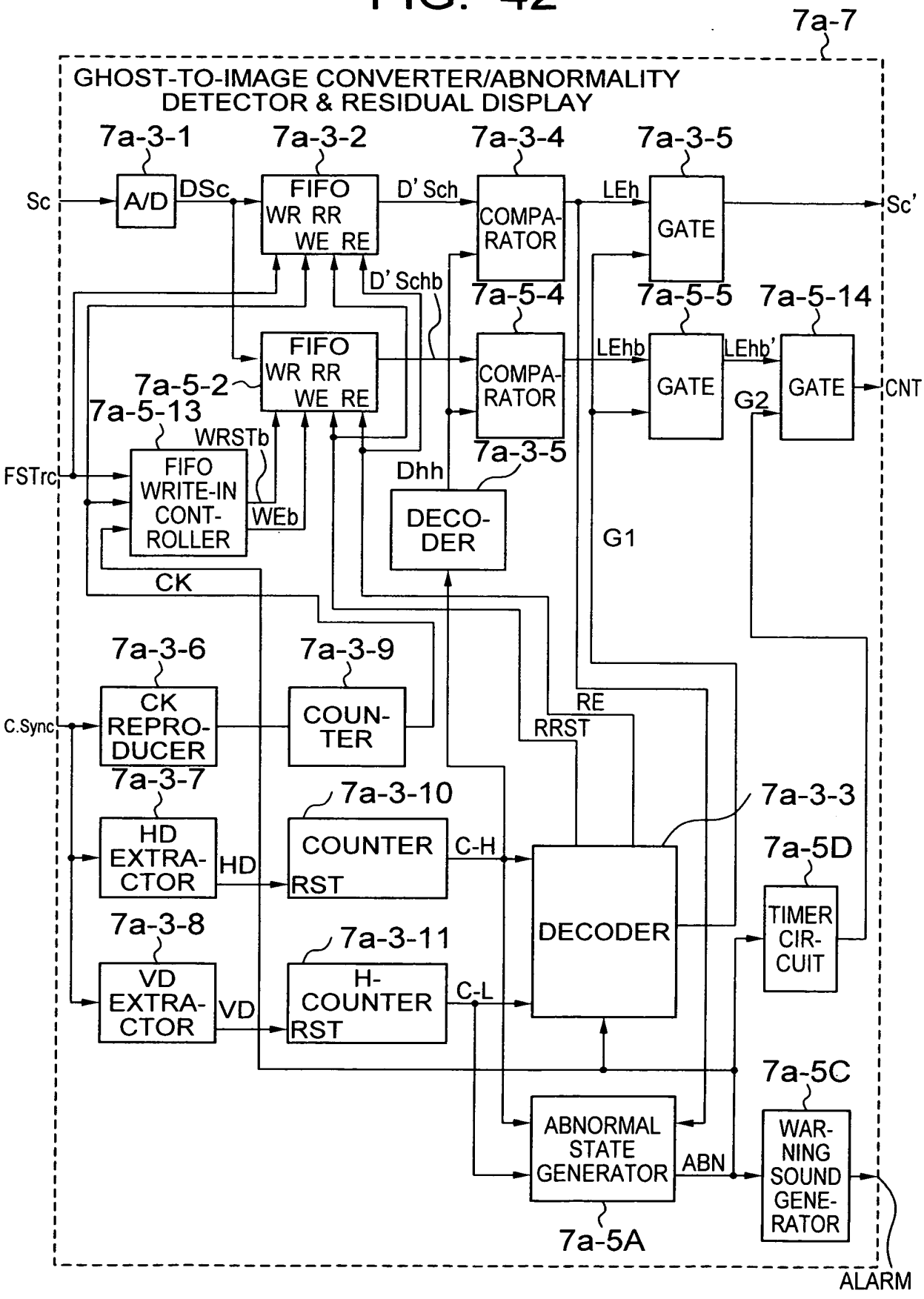

7a-7
GHOST-TO-IMAGE CONVERTER/ABNORMALITY DETECTOR & RESIDUAL DISPLAY
7a-3-1
7a-3-2
7a-3-4
7a-3-5
Sc
A/D
DSc
FIFO
WR RR
WE RE
D' Sch
COMPA-RATOR
LEh
GATE
Sc'
D' Schb
7a-5-4
7a-5-5
7a-5-14
FIFO
WR RR
WE RE
COMPA-RATOR
LEhb
GATE
LEhb'
GATE
CNT
7a-5-2
G2
7a-5-13
WRSTb
FSTrc
FIFO WRITE-IN CONT-ROLLER
WEb
7a-3-5
Dhh
DECO-DER
G1
CK
7a-3-6
7a-3-9
C.Sync
CK REPRO-DUCER
COUN-TER
RE
RRST
7a-3-7
7a-3-10
7a-3-3
HD EXTRA-CTOR
HD
COUNTER
RST
C-H
7a-5D
DECODER
TIMER CIR-CUIT
7a-3-8
7a-3-11
VD EXTRA-CTOR
VD
H-COUNTER
RST
C-L
7a-5C
ABNORMAL STATE GENERATOR
ABN
WAR-NING SOUND GENE-RATOR
7a-5A
ALARM

FIG. 43

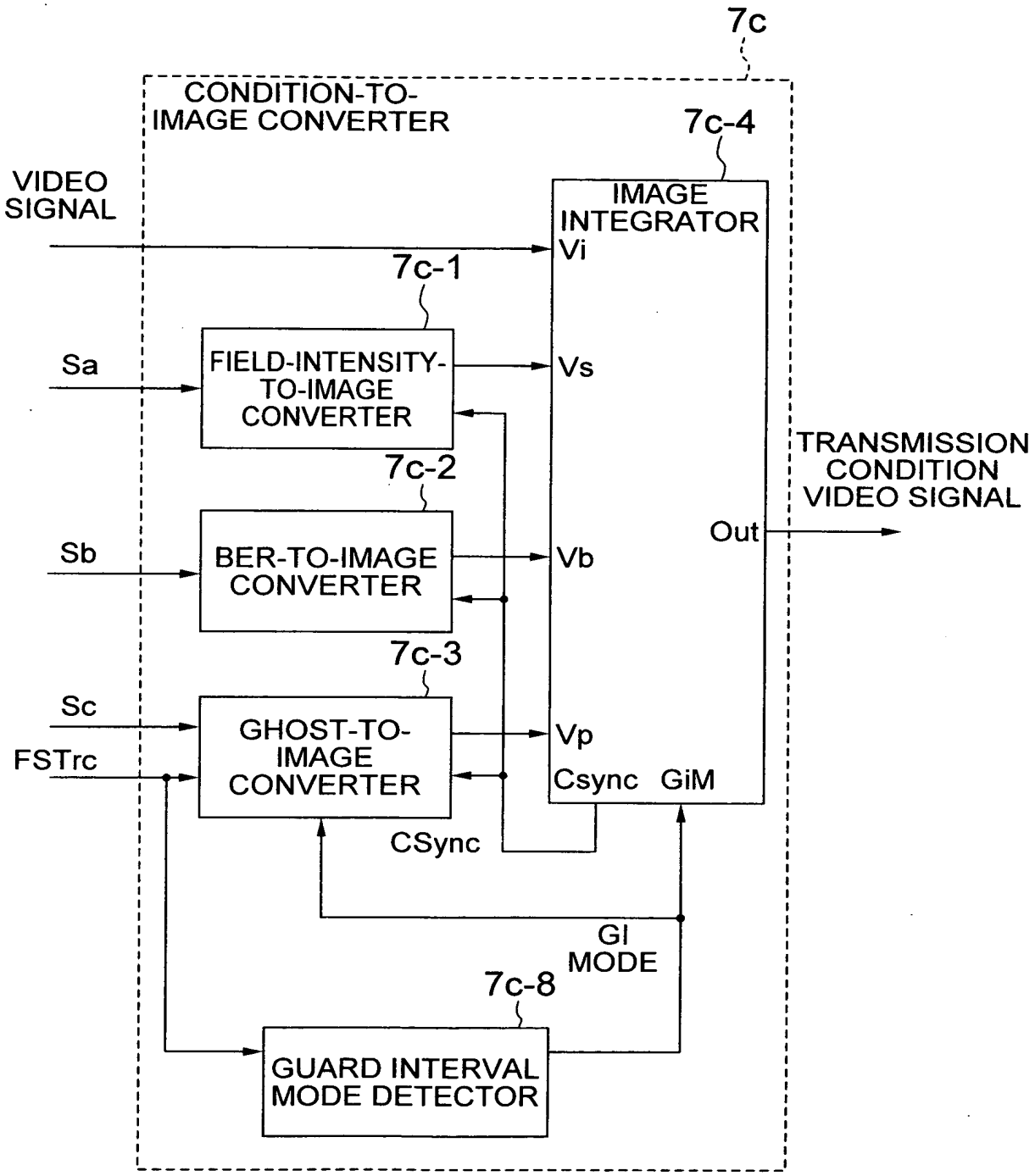

7c
CONDITION-TO-IMAGE CONVERTER
7c-4
IMAGE INTEGRATOR
VIDEO SIGNAL
Vi
7c-1
Sa
FIELD-INTENSITY-TO-IMAGE CONVERTER
Vs
7c-2
Sb
BER-TO-IMAGE CONVERTER
Vb
7c-3
Sc
FSTrc
GHOST-TO-IMAGE CONVERTER
Vp
Csync
GiM
CSync
TRANSMISSION CONDITION VIDEO SIGNAL
Out
GI MODE
7c-8
GUARD INTERVAL MODE DETECTOR

FIG. 44A

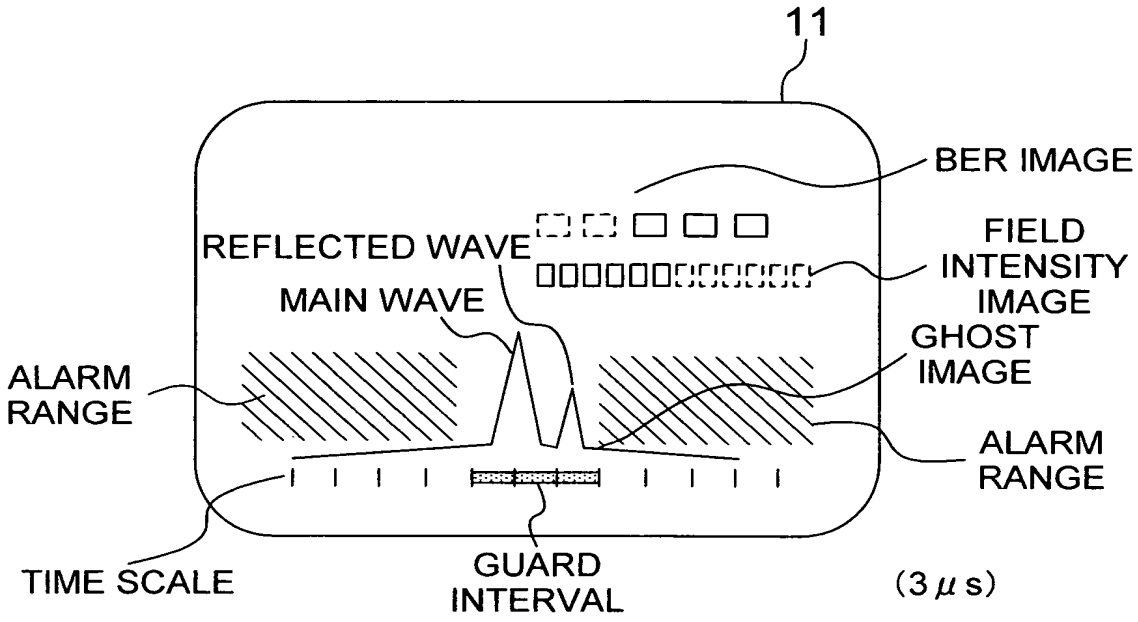


FIG. 44B

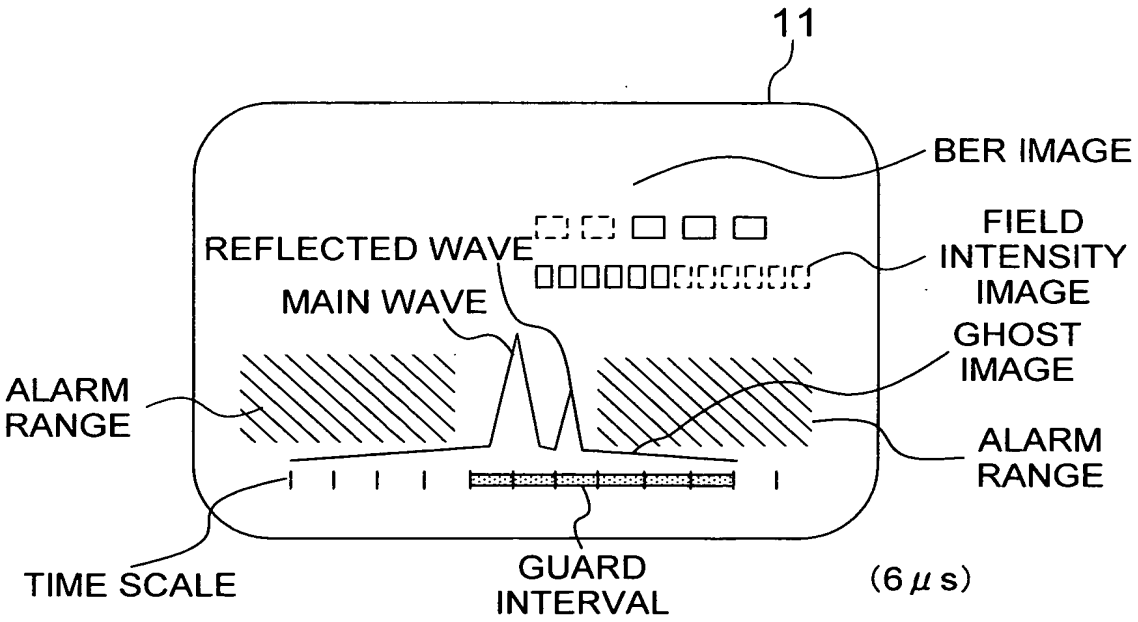


FIG. 45

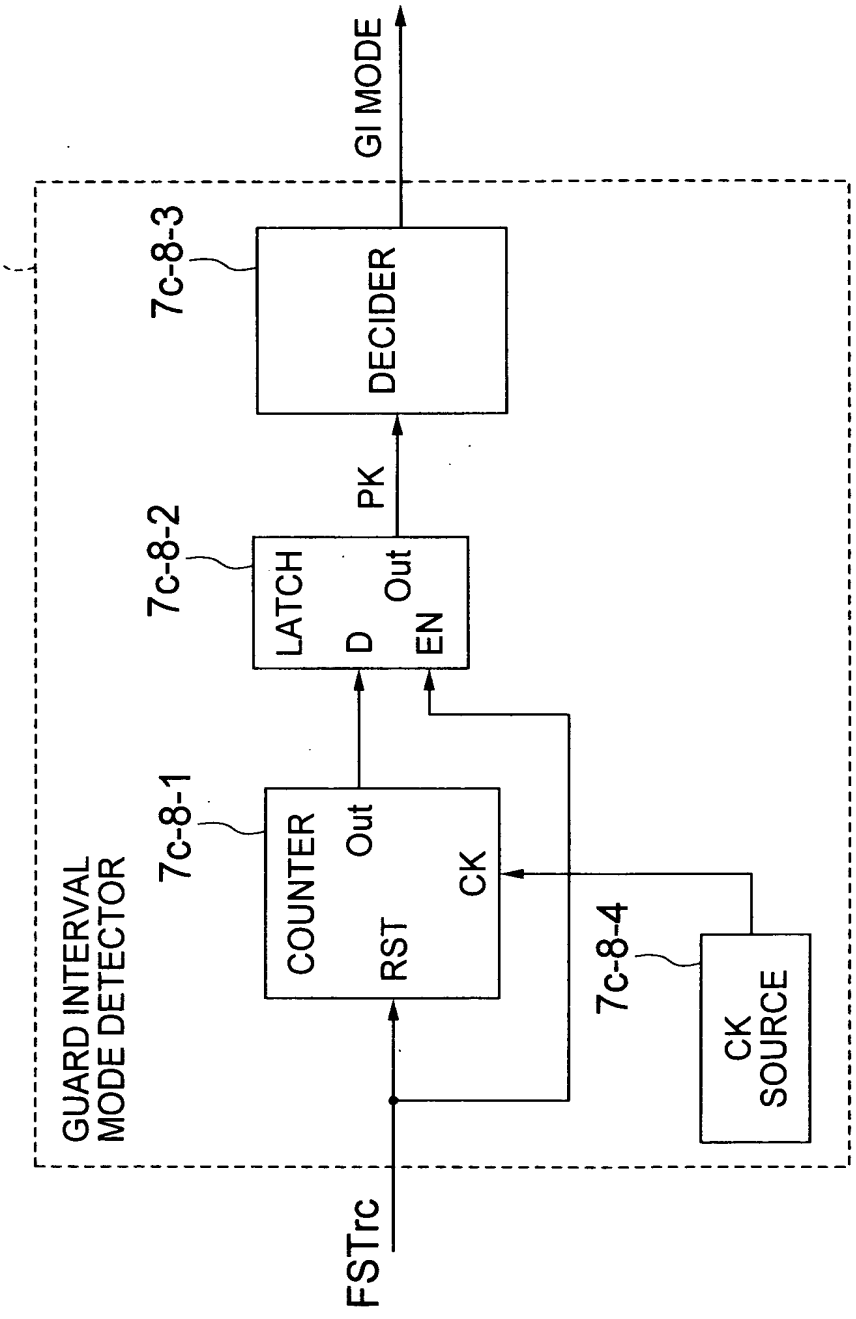

7c-8
GUARD INTERVAL MODE DETECTOR
7c-8-1
COUNTER
Out
RST
CK
7c-8-2
LATCH
D
Out
EN
PK
7c-8-3
DECIDER
GI MODE
7c-8-4
CK SOURCE
FSTrc

FIG. 46A

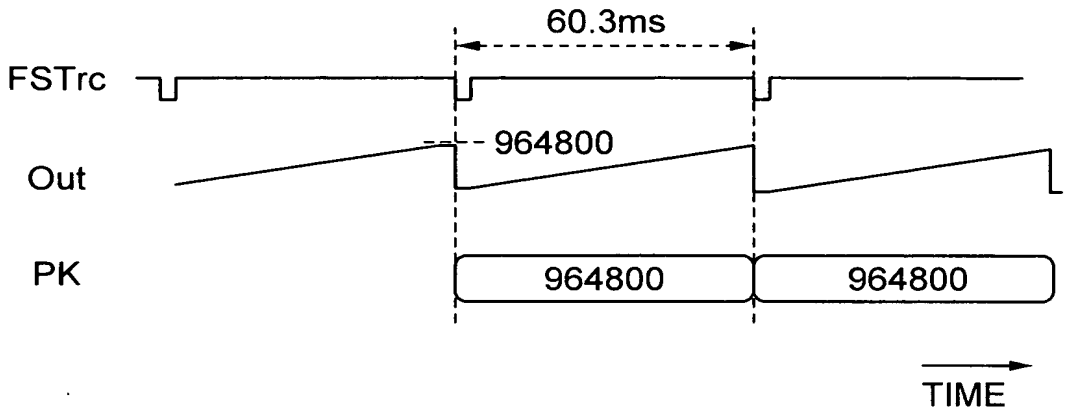


FIG. 46B

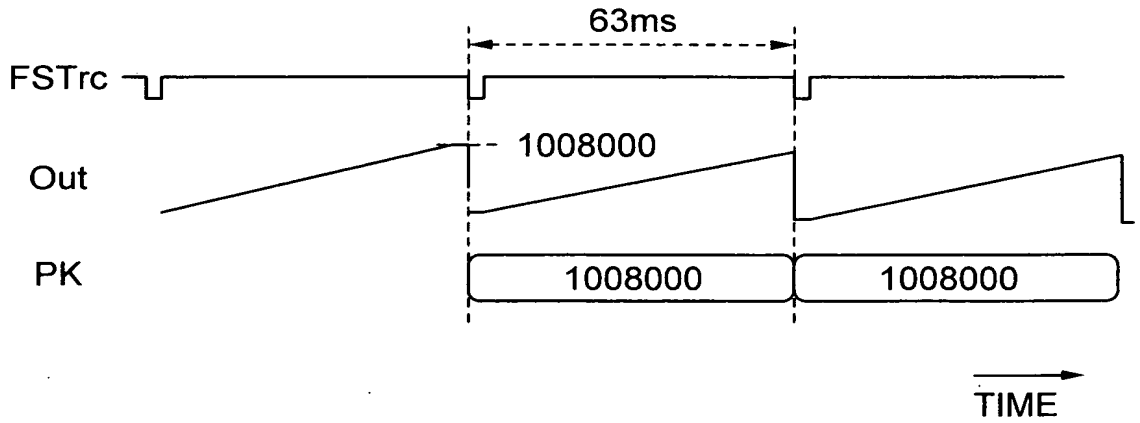


FIG. 47

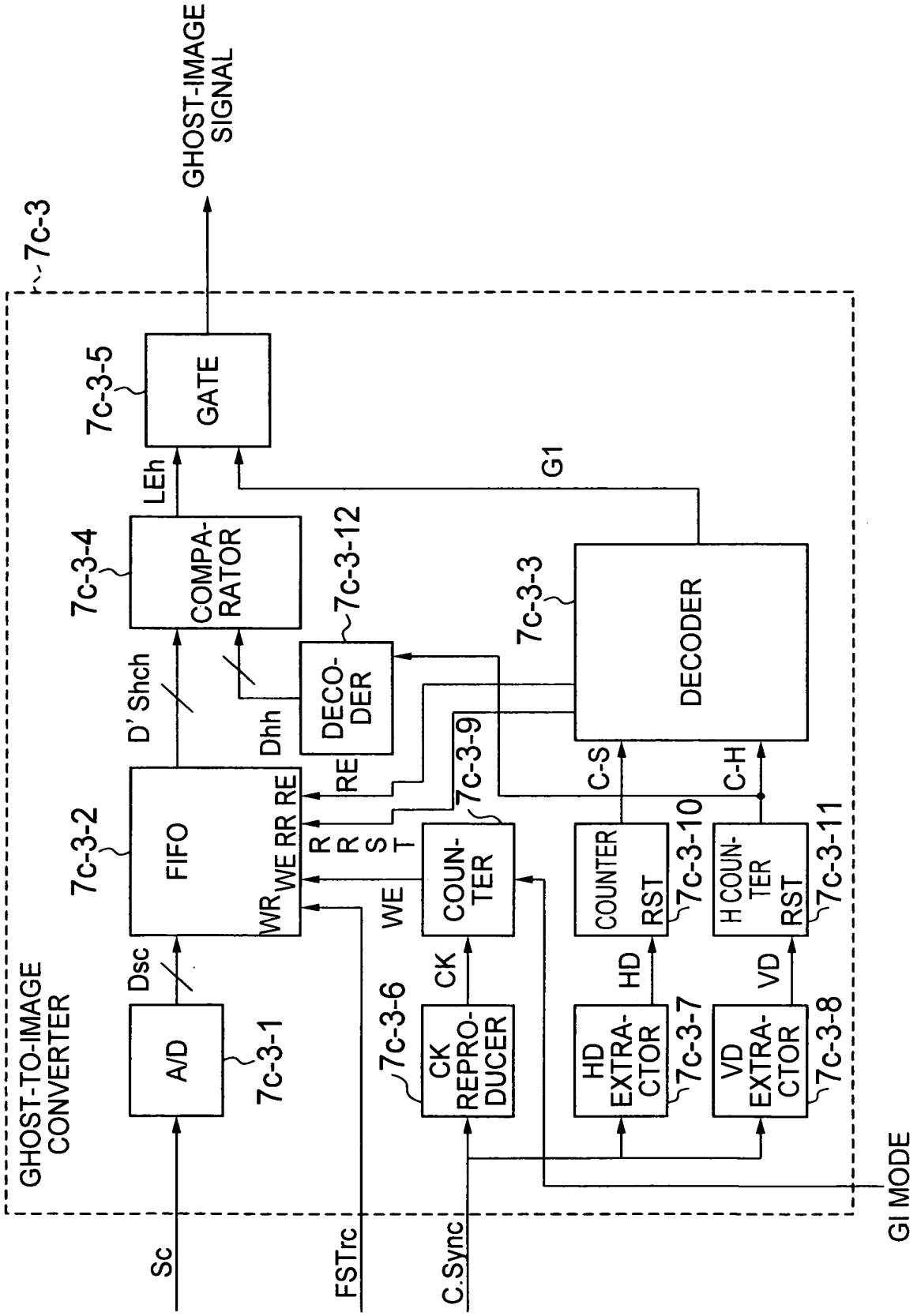

GHOST-IMAGE SIGNAL
7c-3
GHOST-TO-IMAGE CONVERTER
7c-3-5
GATE
LEh
7c-3-4
COMPA-RATOR
D' Shch
Dhh
7c-3-12
DECO-DER
7c-3-3
DECODER
G1
7c-3-2
FIFO
WR WE RR RE
RE
RRST
7c-3-9
COUN-TER
WE
C-S
C-H
COUNTER
RST
7c-3-10
H COUN-TER
RST
7c-3-11
Dsc
A/D
7c-3-1
CK
7c-3-6
CK REPRO-DUCER
HD
HD EXTRA-CTOR
7c-3-7
VD
VD EXTRA-CTOR
7c-3-8
Sc
FSTrc
C.Sync
GI MODE

FIG. 48

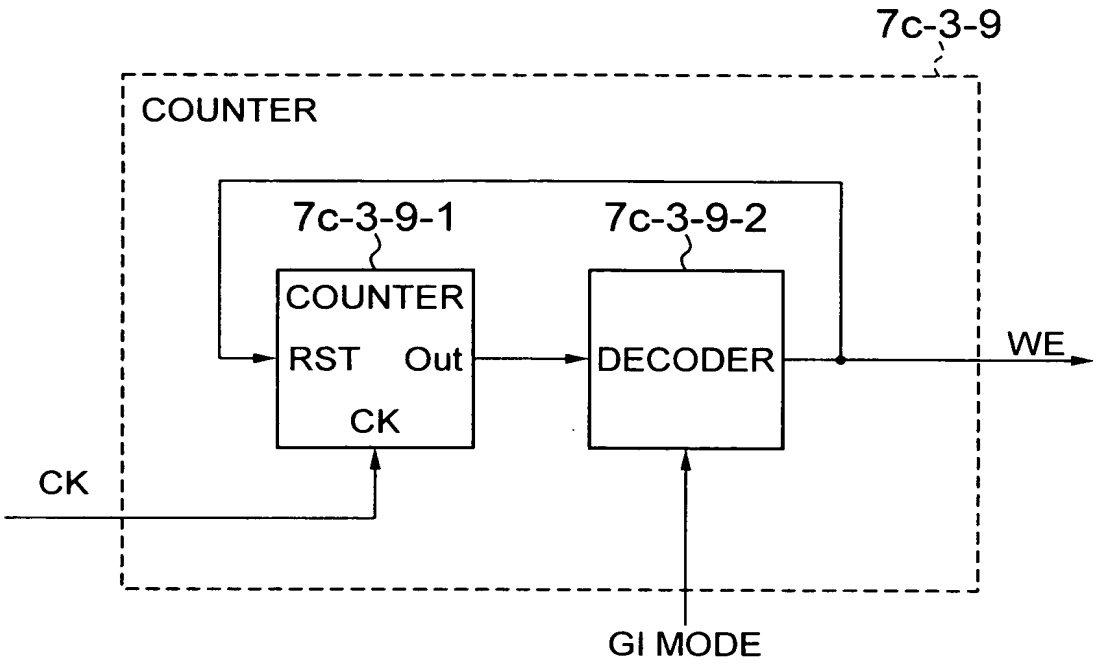


FIG. 49A

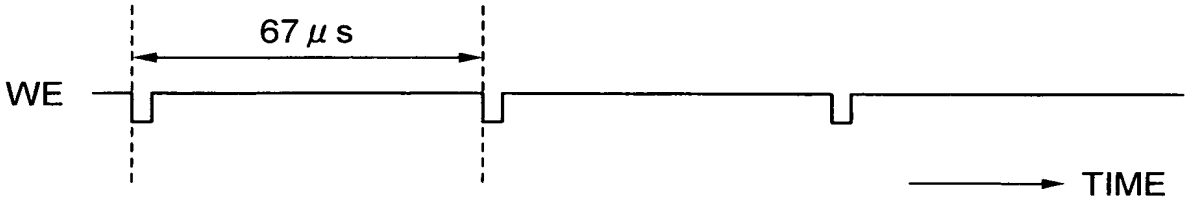


FIG. 49B

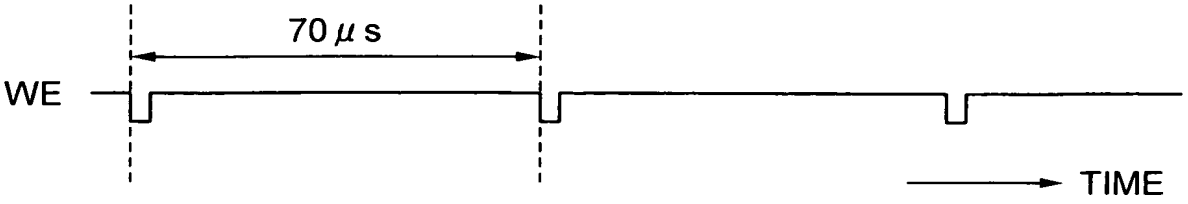


FIG. 50

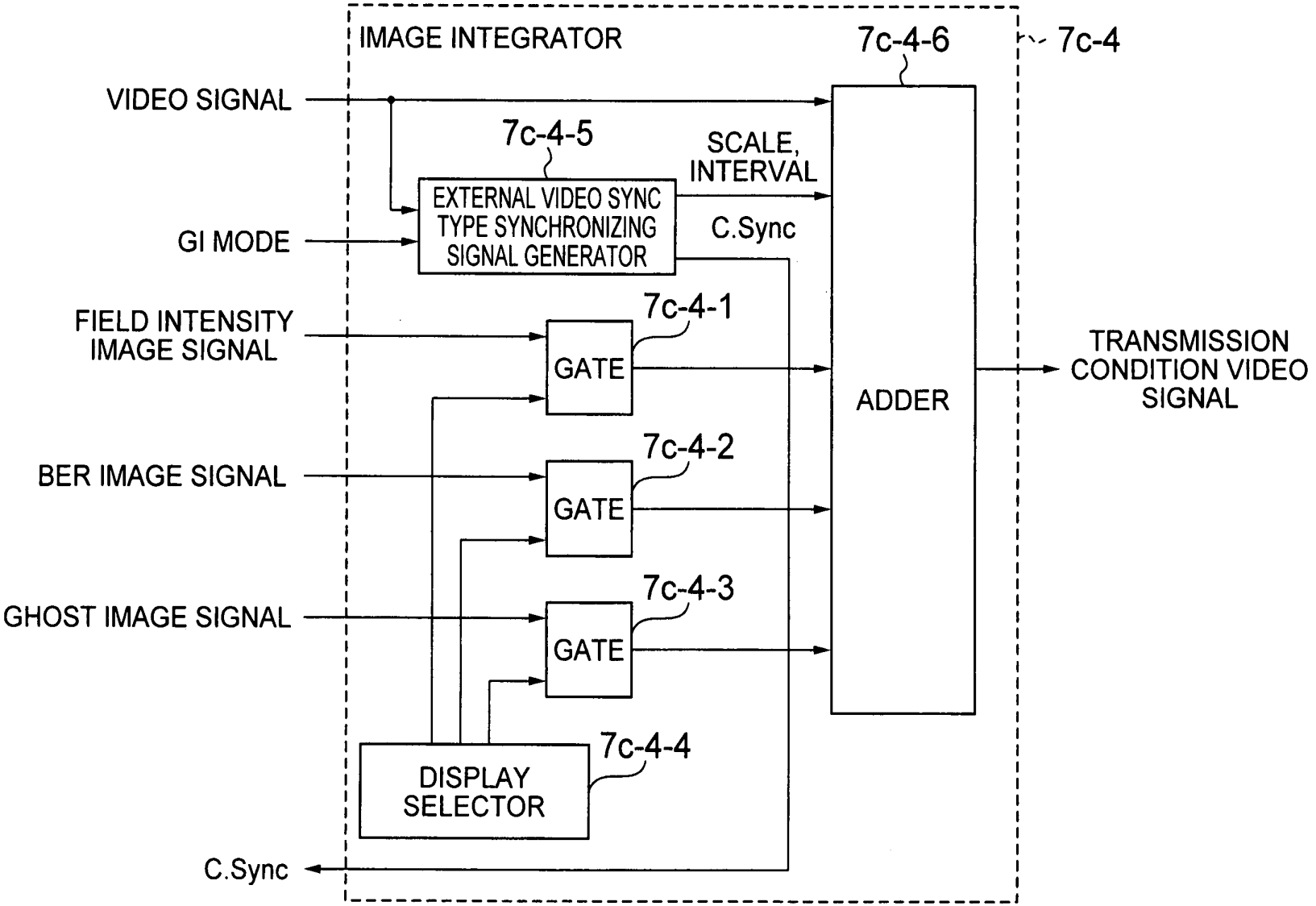


IMAGE INTEGRATOR
7c-4-6
7c-4
VIDEO SIGNAL
7c-4-5
SCALE, INTERVAL
EXTERNAL VIDEO SYNC TYPE SYNCHRONIZING SIGNAL GENERATOR
C.Sync
GI MODE
FIELD INTENSITY IMAGE SIGNAL
7c-4-1
GATE
ADDER
TRANSMISSION CONDITION VIDEO SIGNAL
BER IMAGE SIGNAL
7c-4-2
GATE
GHOST IMAGE SIGNAL
7c-4-3
GATE
7c-4-4
DISPLAY SELECTOR
C.Sync

FIG. 51

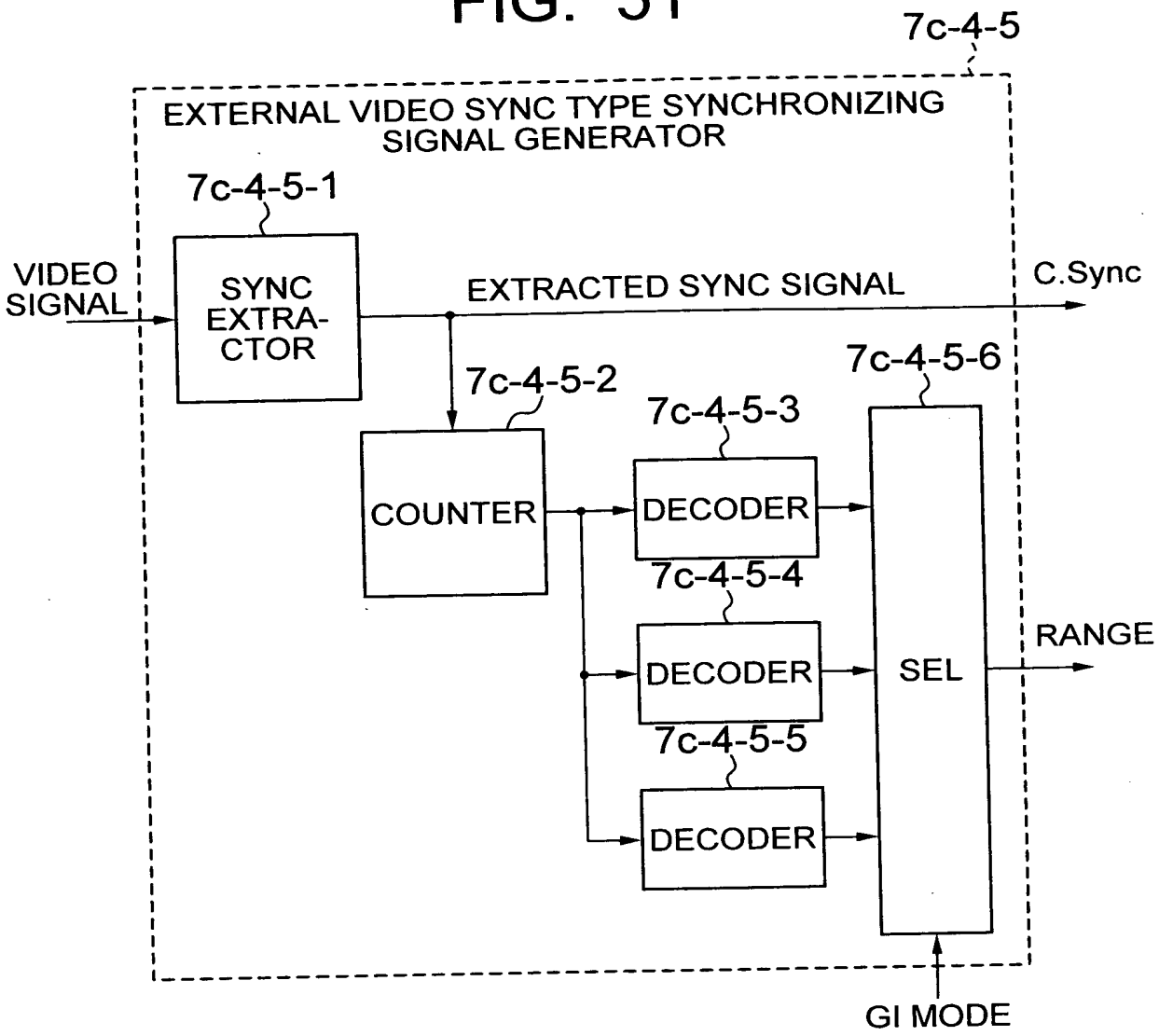


FIG. 52A

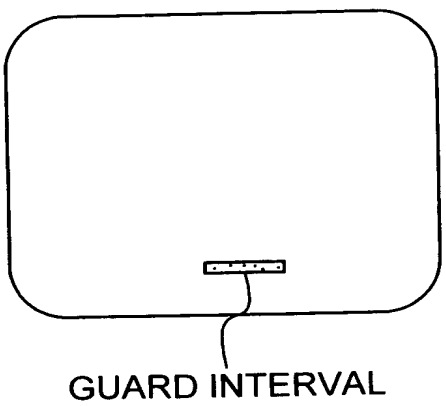


FIG. 52B

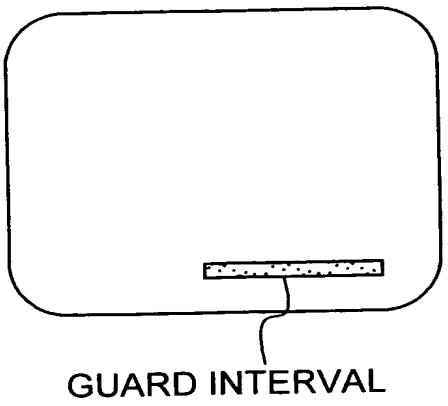


FIG. 53

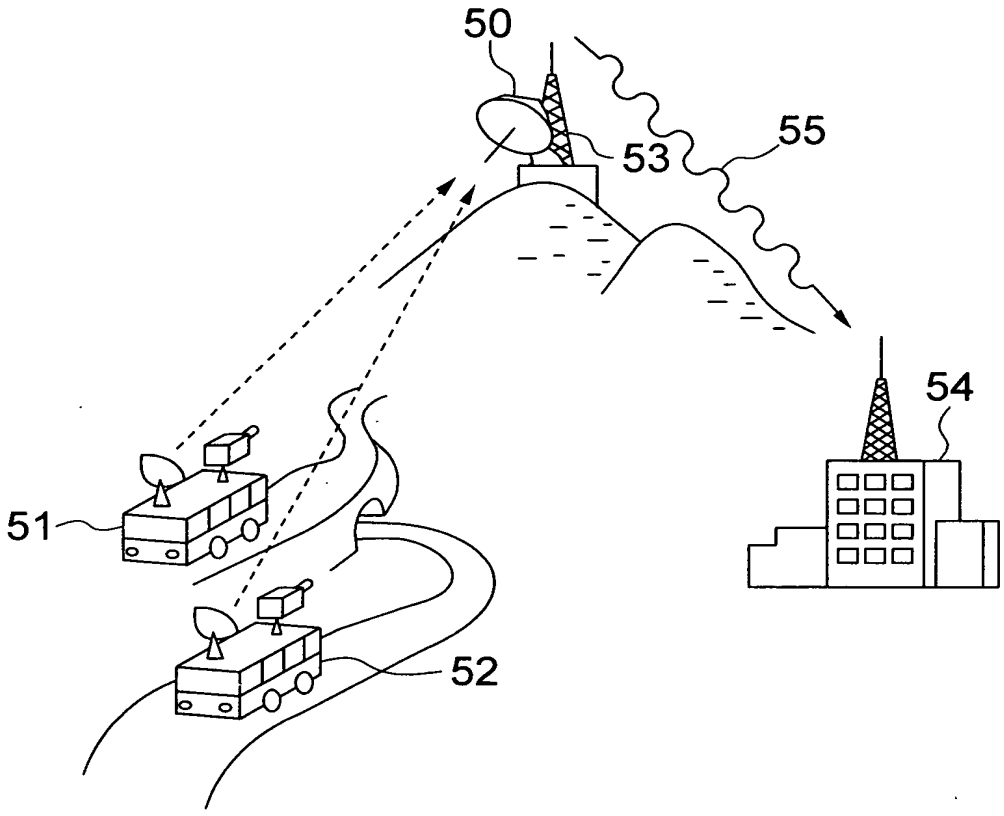


FIG. 54

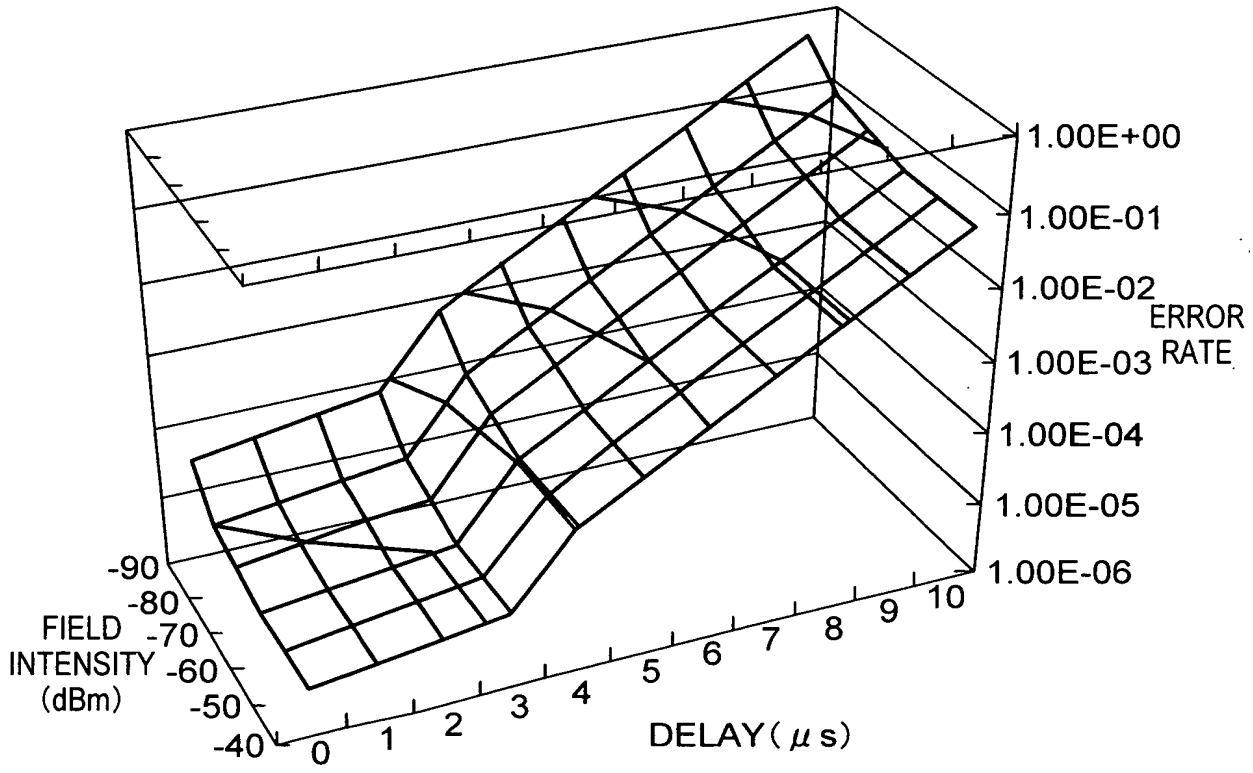

1.00E+00
1.00E-01
1.00E-02
1.00E-03
1.00E-04
1.00E-05
1.00E-06
ERROR RATE
-90
-80
-70
-60
-50
-40
FIELD INTENSITY (dBm)
0
1
2
3
4
5
6
7
8
9
10
DELAY(μs)

FIG. 55

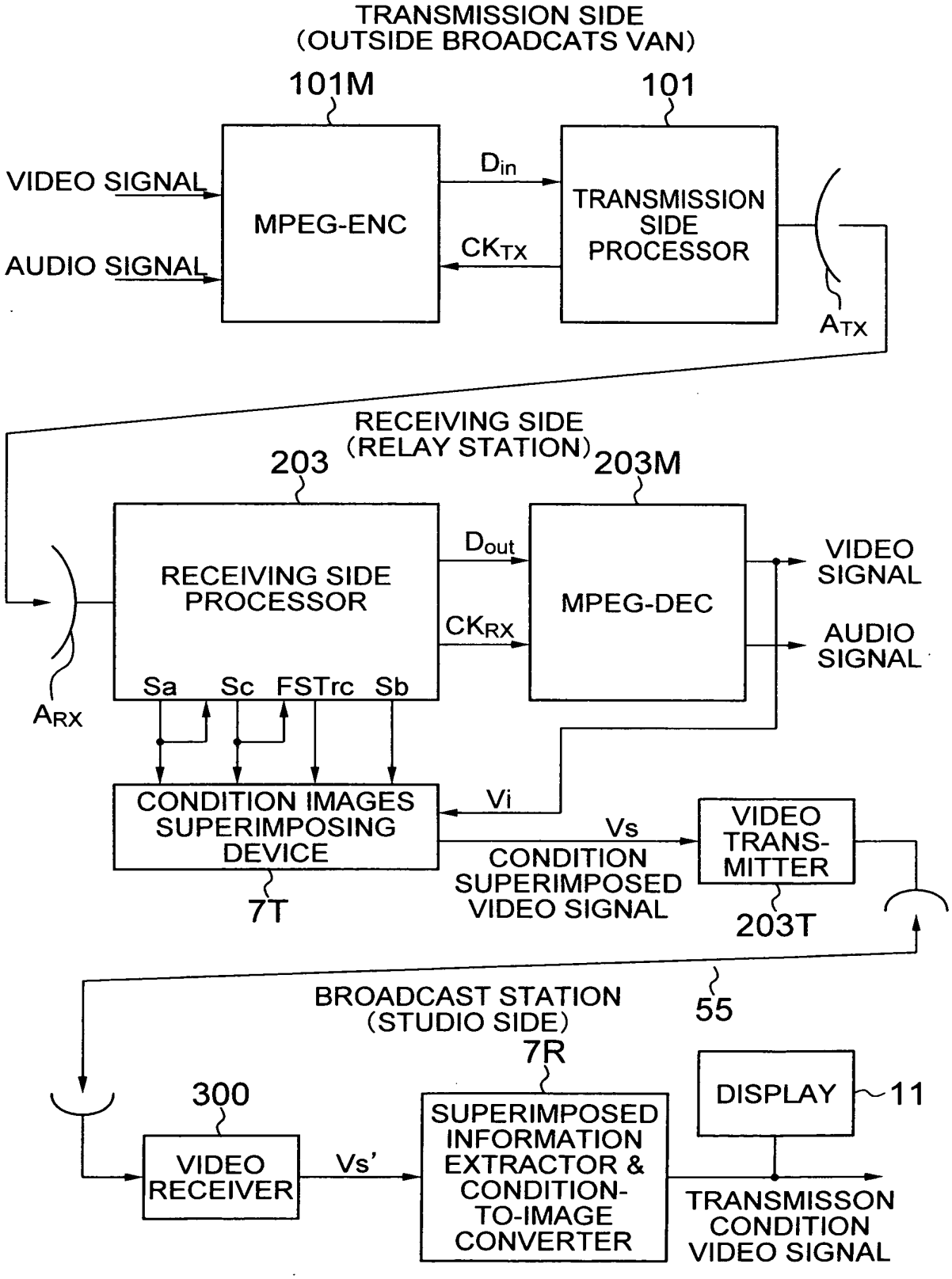

TRANSMISSION SIDE
(OUTSIDE BROADCATS VAN)
101M
101
VIDEO SIGNAL
AUDIO SIGNAL
MPEG-ENC
Din
CKTX
TRANSMISSION SIDE PROCESSOR
ATX
RECEIVING SIDE
(RELAY STATION)
203
203M
RECEIVING SIDE PROCESSOR
Dout
CKRX
MPEG-DEC
VIDEO SIGNAL
AUDIO SIGNAL
ARX
Sa
Sc
FSTrc
Sb
CONDITION IMAGES SUPERIMPOSING DEVICE
7T
Vi
Vs
CONDITION SUPERIMPOSED VIDEO SIGNAL
VIDEO TRANS-MITTER
203T
55
BROADCAST STATION
(STUDIO SIDE)
7R
300
VIDEO RECEIVER
Vs'
SUPERIMPOSED INFORMATION EXTRACTOR & CONDITION-TO-IMAGE CONVERTER
DISPLAY
11
TRANSMISSON CONDITION VIDEO SIGNAL

FIG. 56A

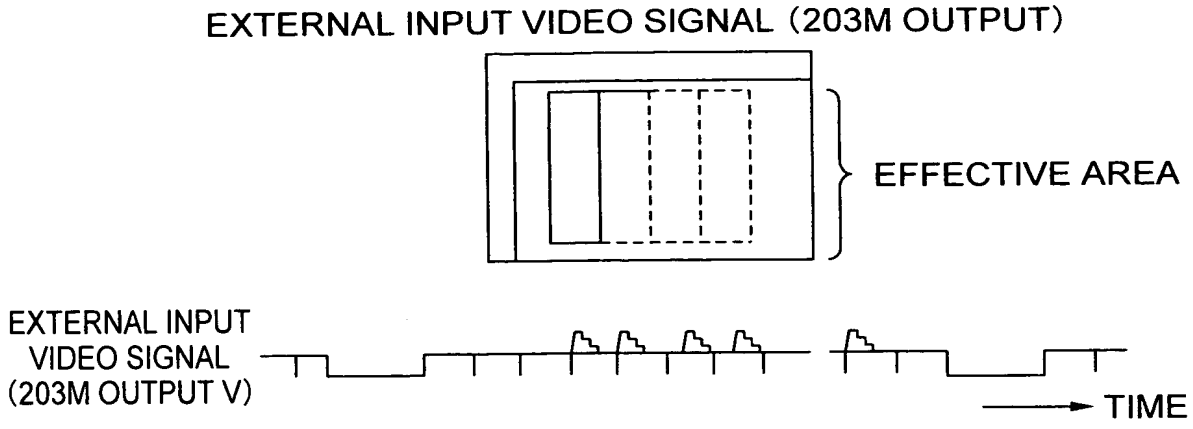


FIG. 56B

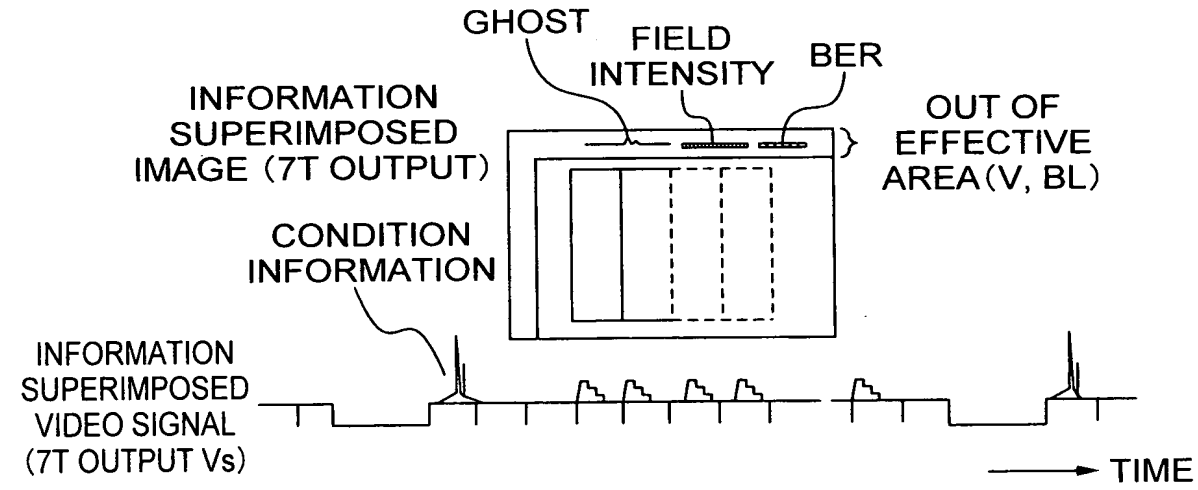


FIG. 56C

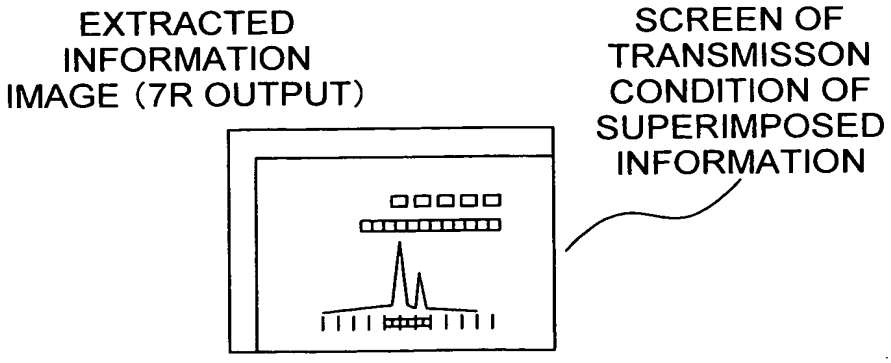


FIG. 57

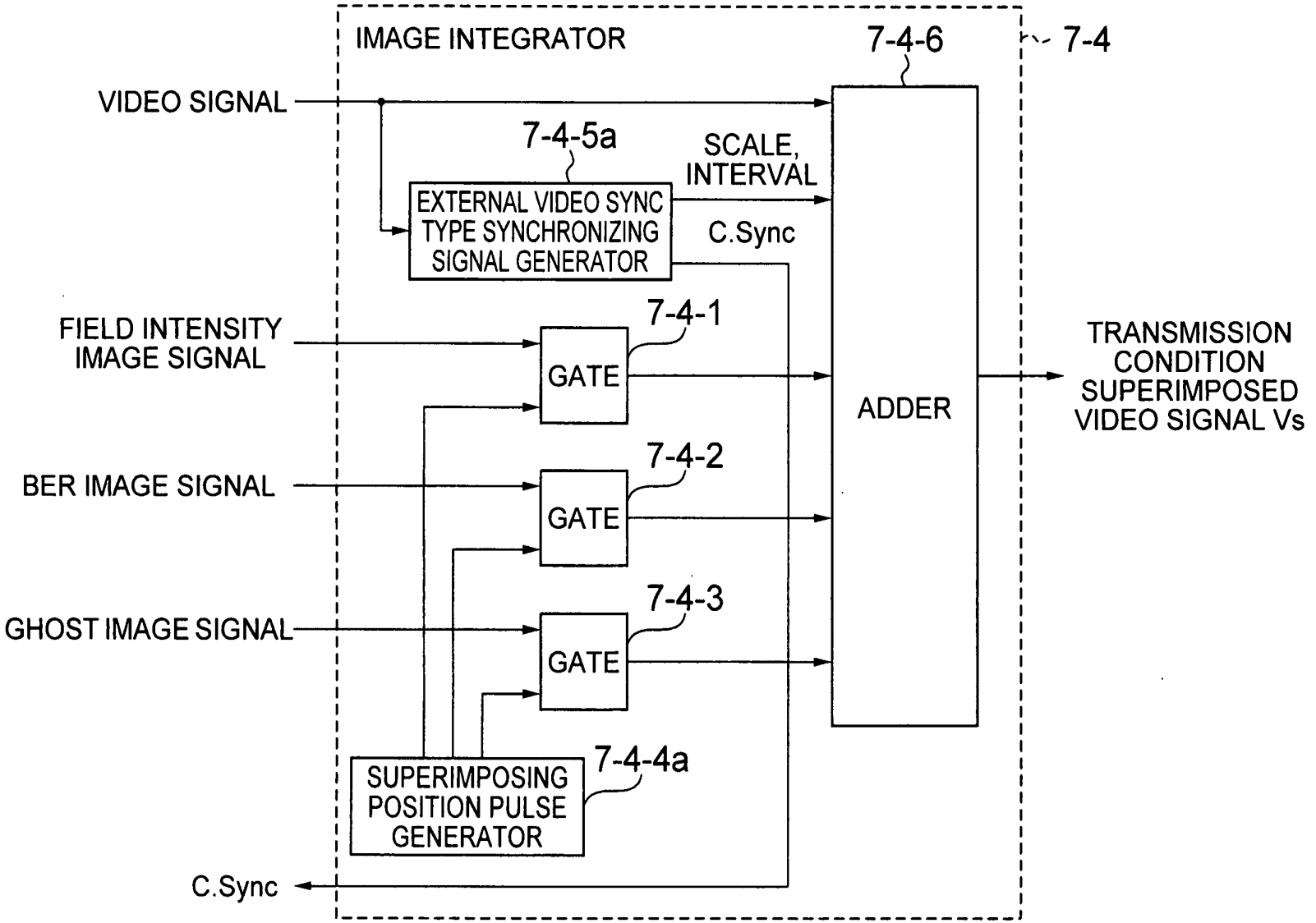


IMAGE INTEGRATOR
7-4-6
7-4
VIDEO SIGNAL
7-4-5a
SCALE, INTERVAL
EXTERNAL VIDEO SYNC TYPE SYNCHRONIZING SIGNAL GENERATOR
C.Sync
FIELD INTENSITY IMAGE SIGNAL
7-4-1
GATE
ADDER
TRANSMISSION CONDITION SUPERIMPOSED VIDEO SIGNAL Vs
BER IMAGE SIGNAL
7-4-2
GATE
GHOST IMAGE SIGNAL
7-4-3
GATE
SUPERIMPOSING POSITION PULSE GENERATOR
7-4-4a
C.Sync

FIG. 58

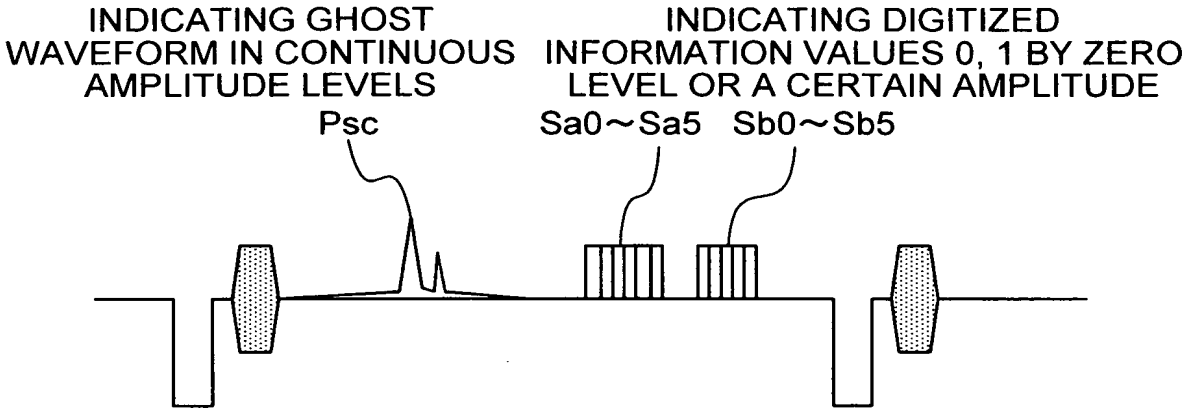

INDICATING GHOST WAVEFORM IN CONTINUOUS AMPLITUDE LEVELS
INDICATING DIGITIZED INFORMATION VALUES 0, 1 BY ZERO LEVEL OR A CERTAIN AMPLITUDE
Psc
Sa0~Sa5
Sb0~Sb5

FIG. 59A

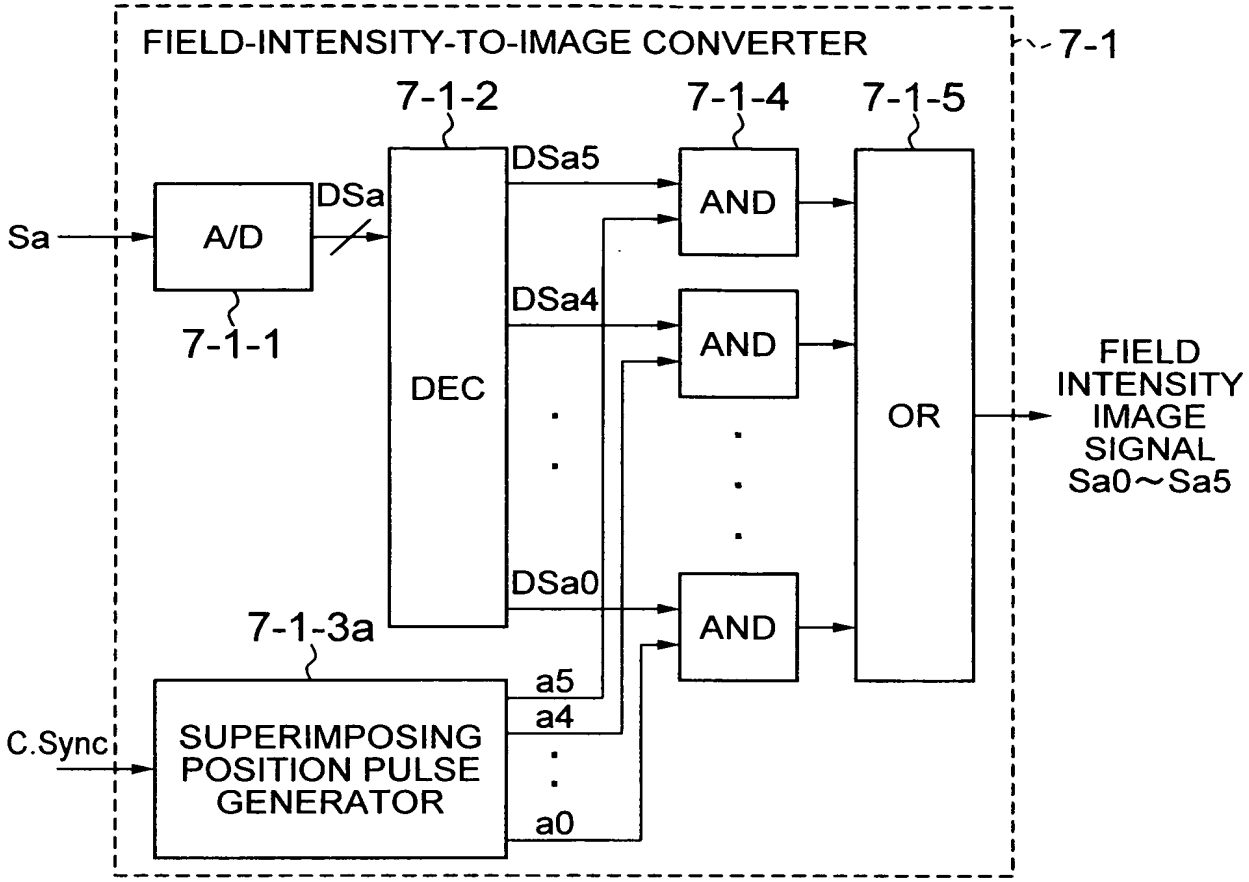


FIG. 59B

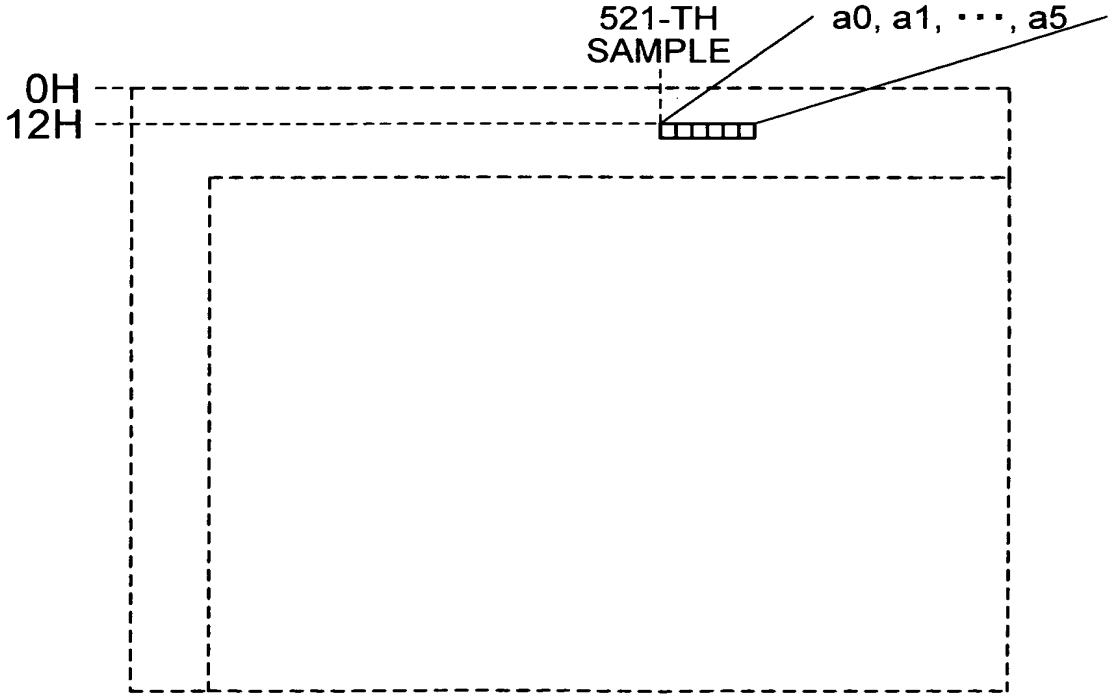


FIG. 60A

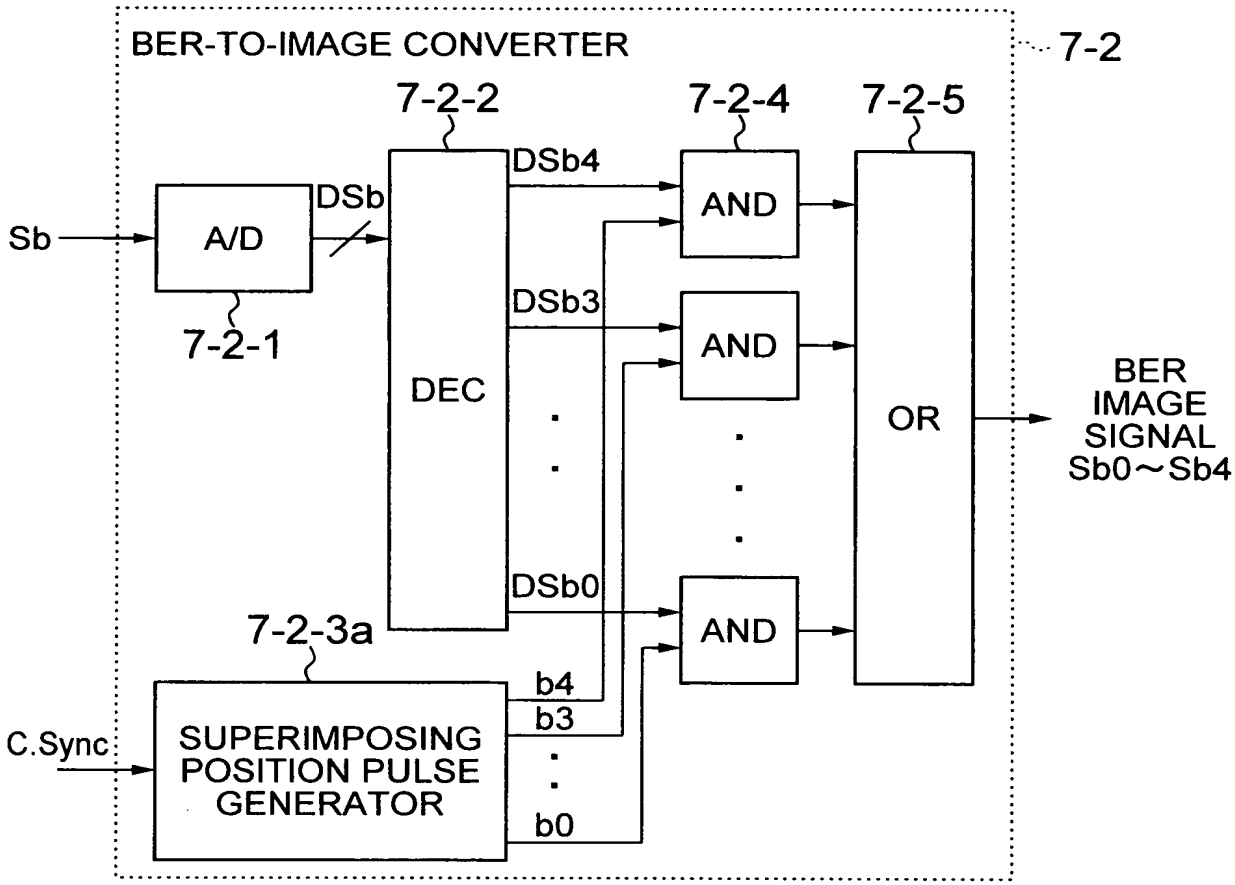


FIG. 60B

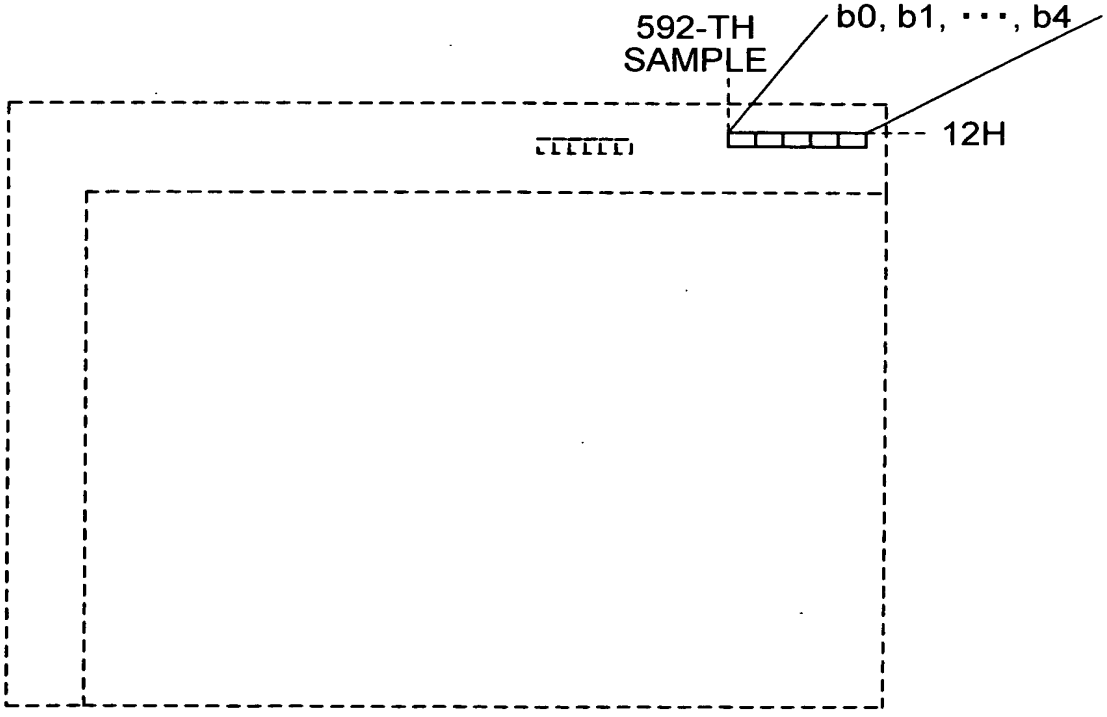


FIG. 61

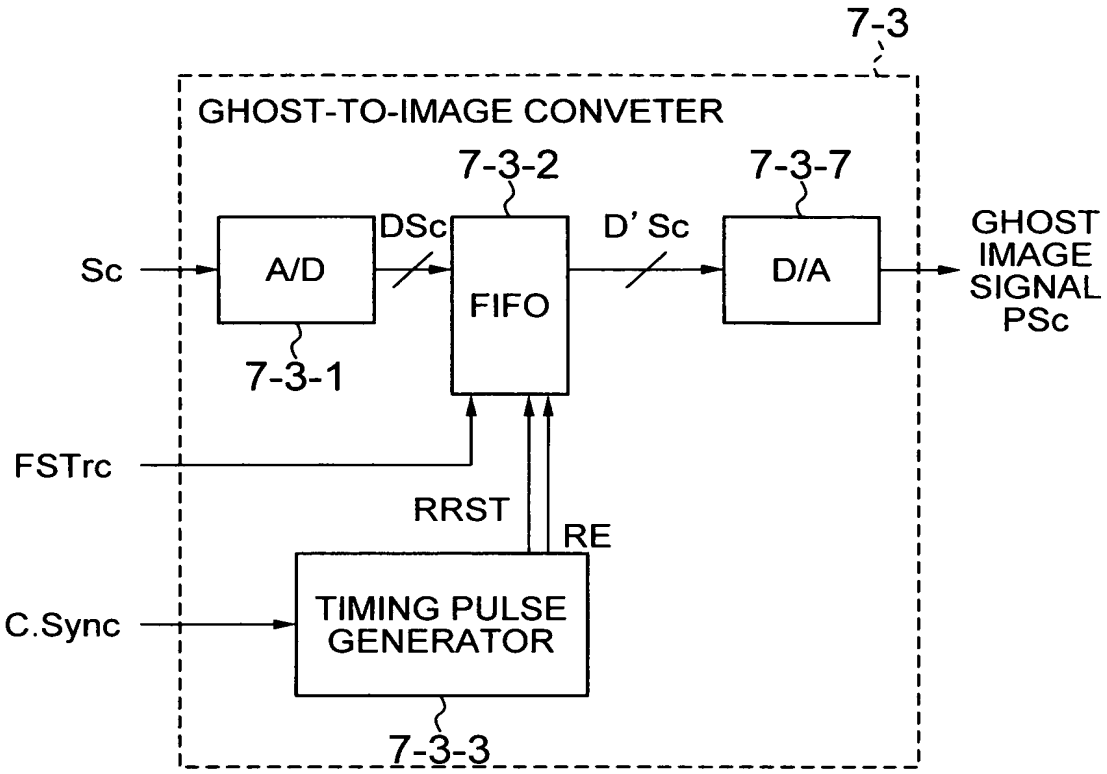

7-3
GHOST-TO-IMAGE CONVETER
7-3-2
7-3-7
Sc
A/D
DSc
FIFO
D' Sc
D/A
GHOST IMAGE SIGNAL PSc
7-3-1
FSTrc
RRST
RE
C.Sync
TIMING PULSE GENERATOR
7-3-3

FIG. 62

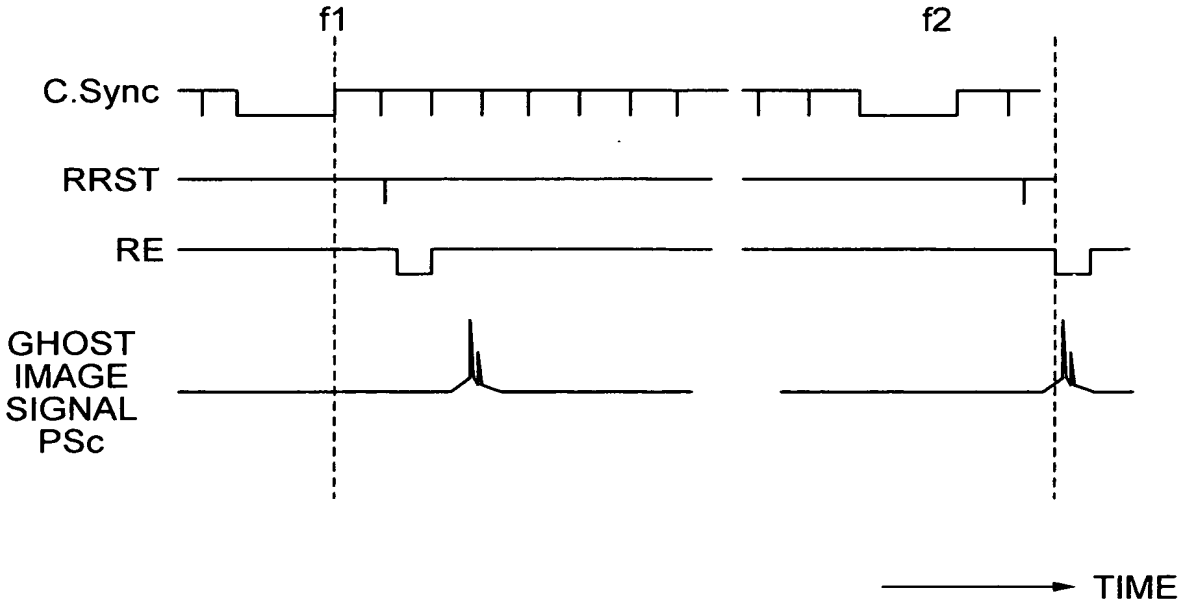

f1
f2
C.Sync
RRST
RE
GHOST IMAGE SIGNAL PSc
TIME

FIG. 63A

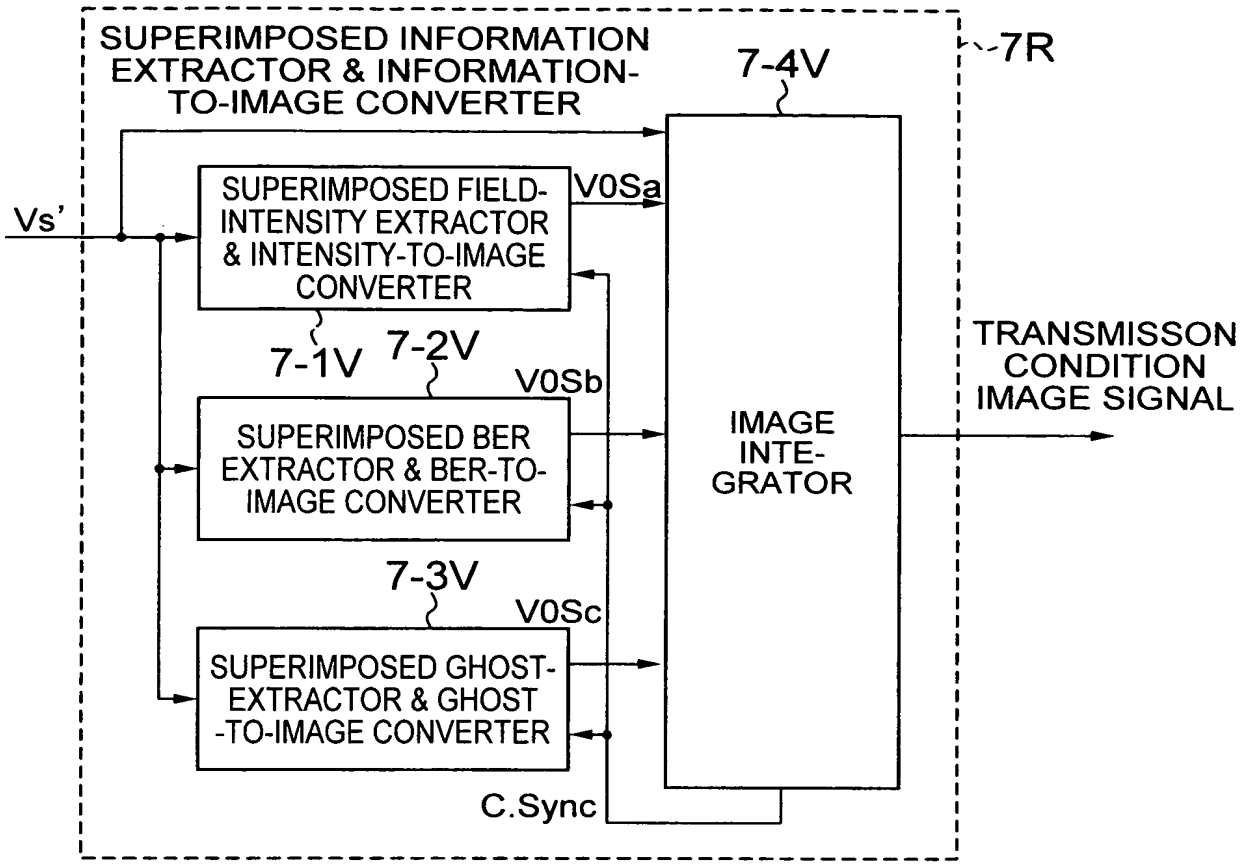


FIG. 63B

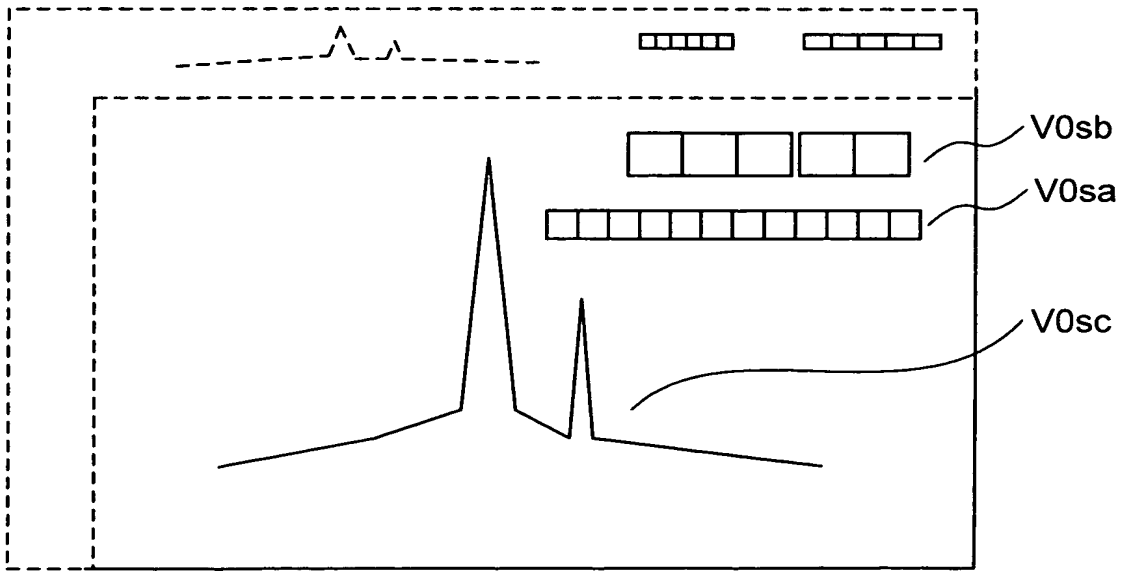


FIG. 64A

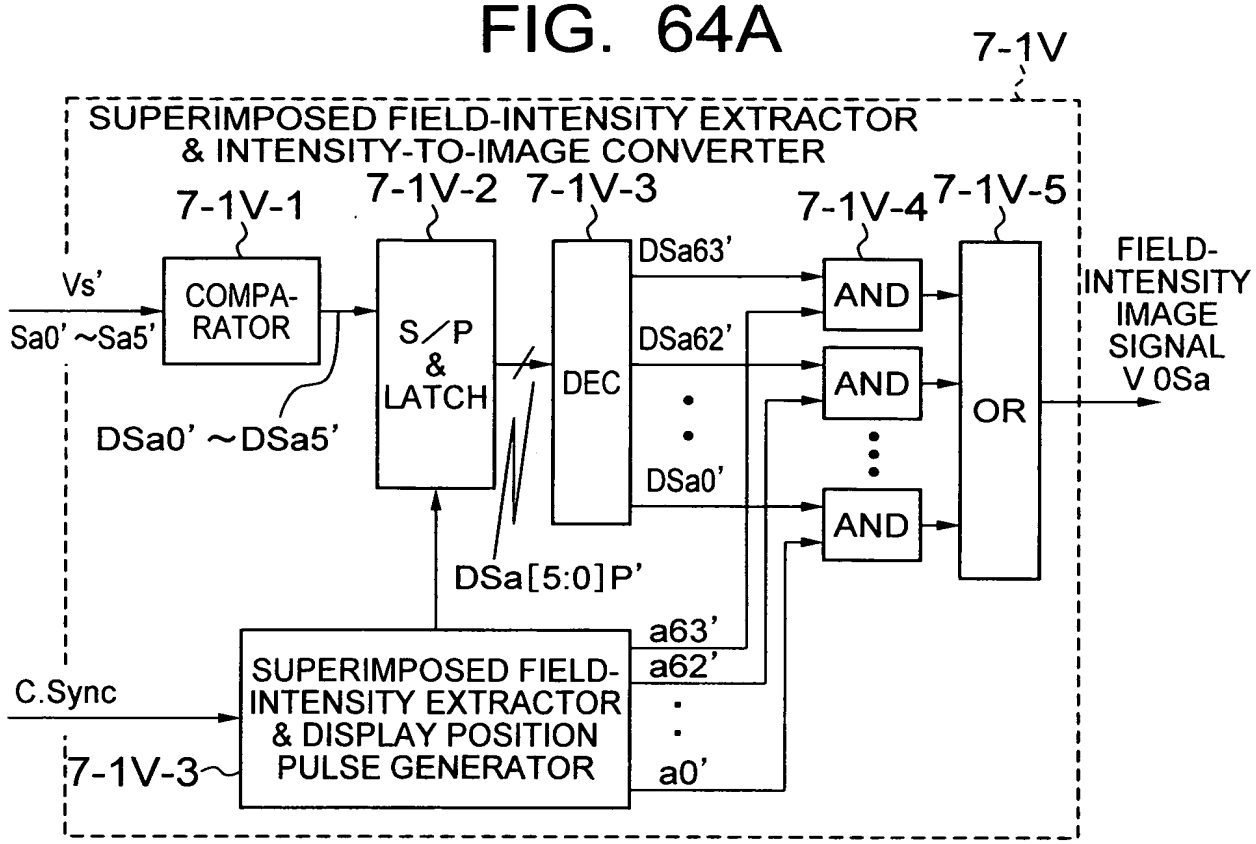


FIG. 64B

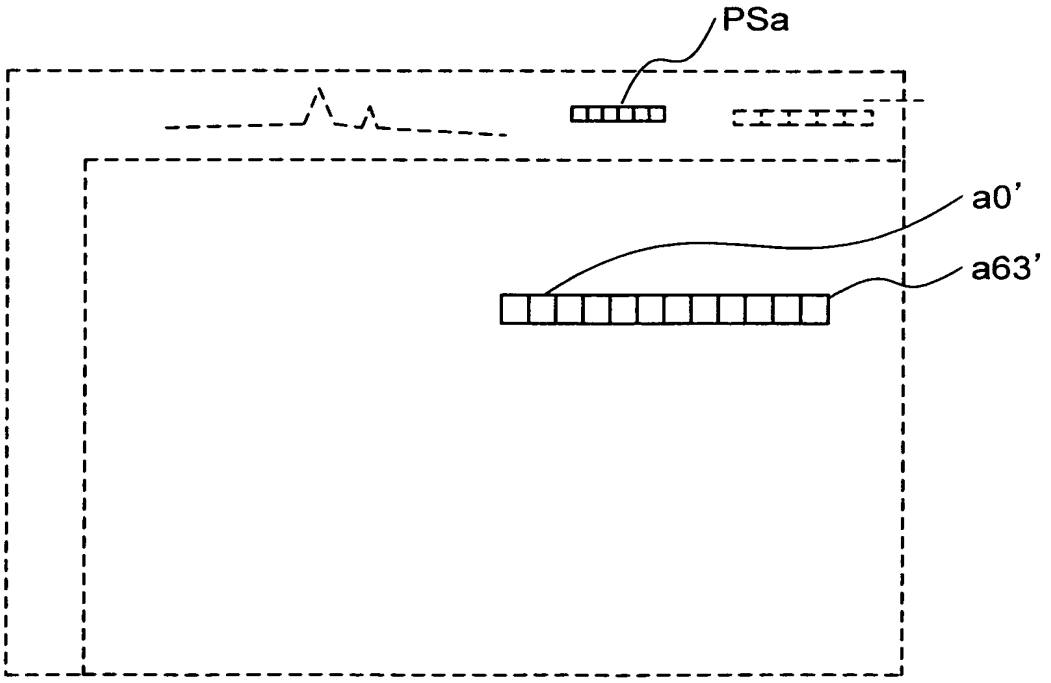


FIG. 65A

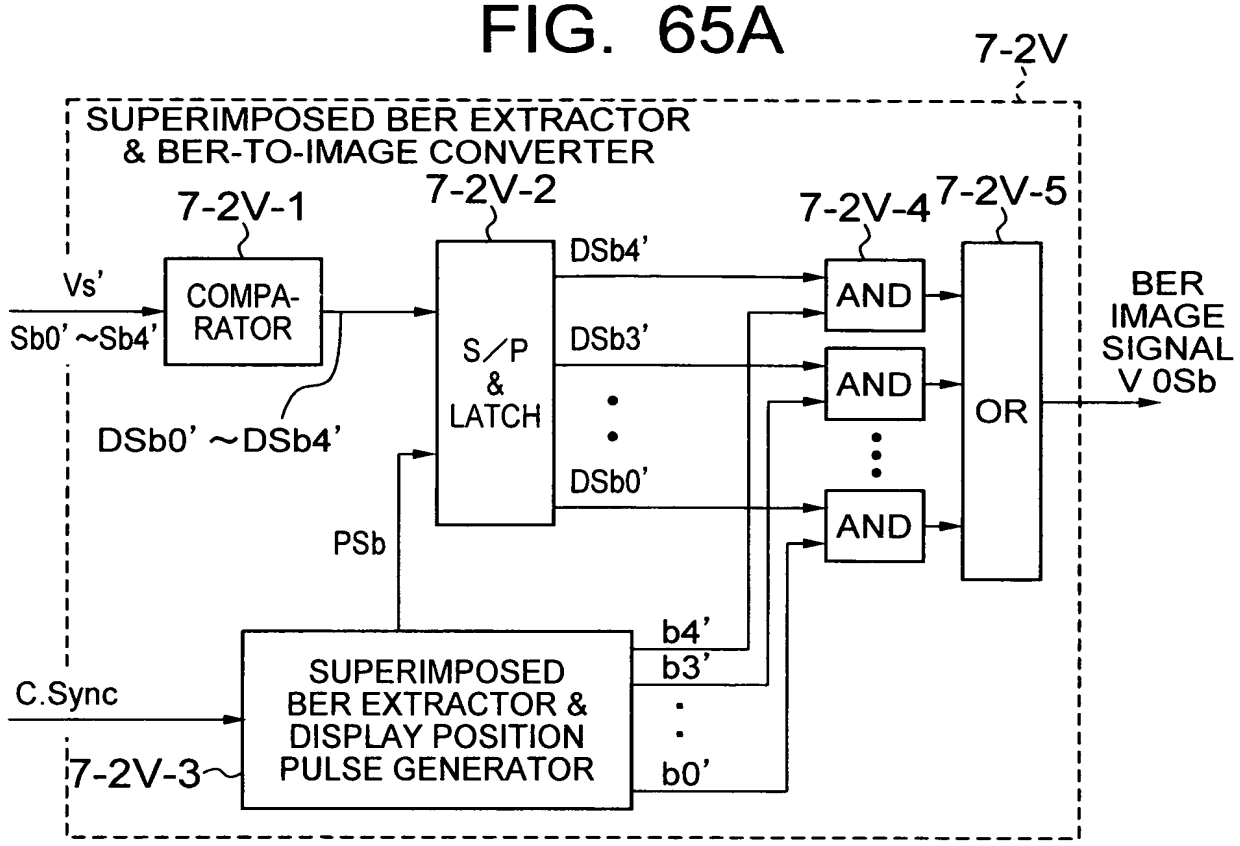


FIG. 65B

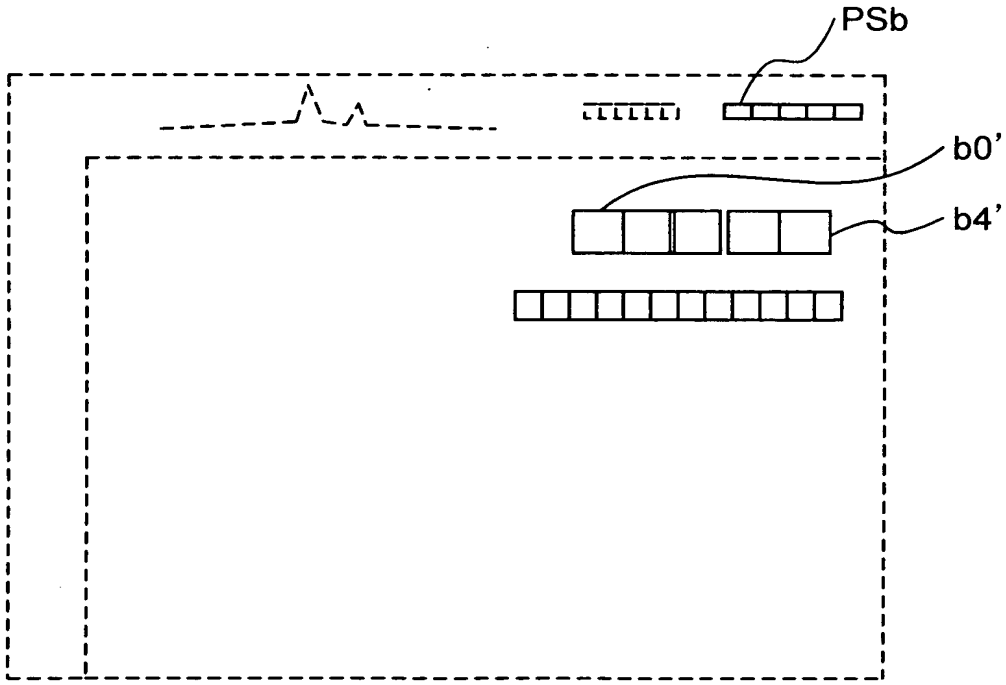


FIG. 66A

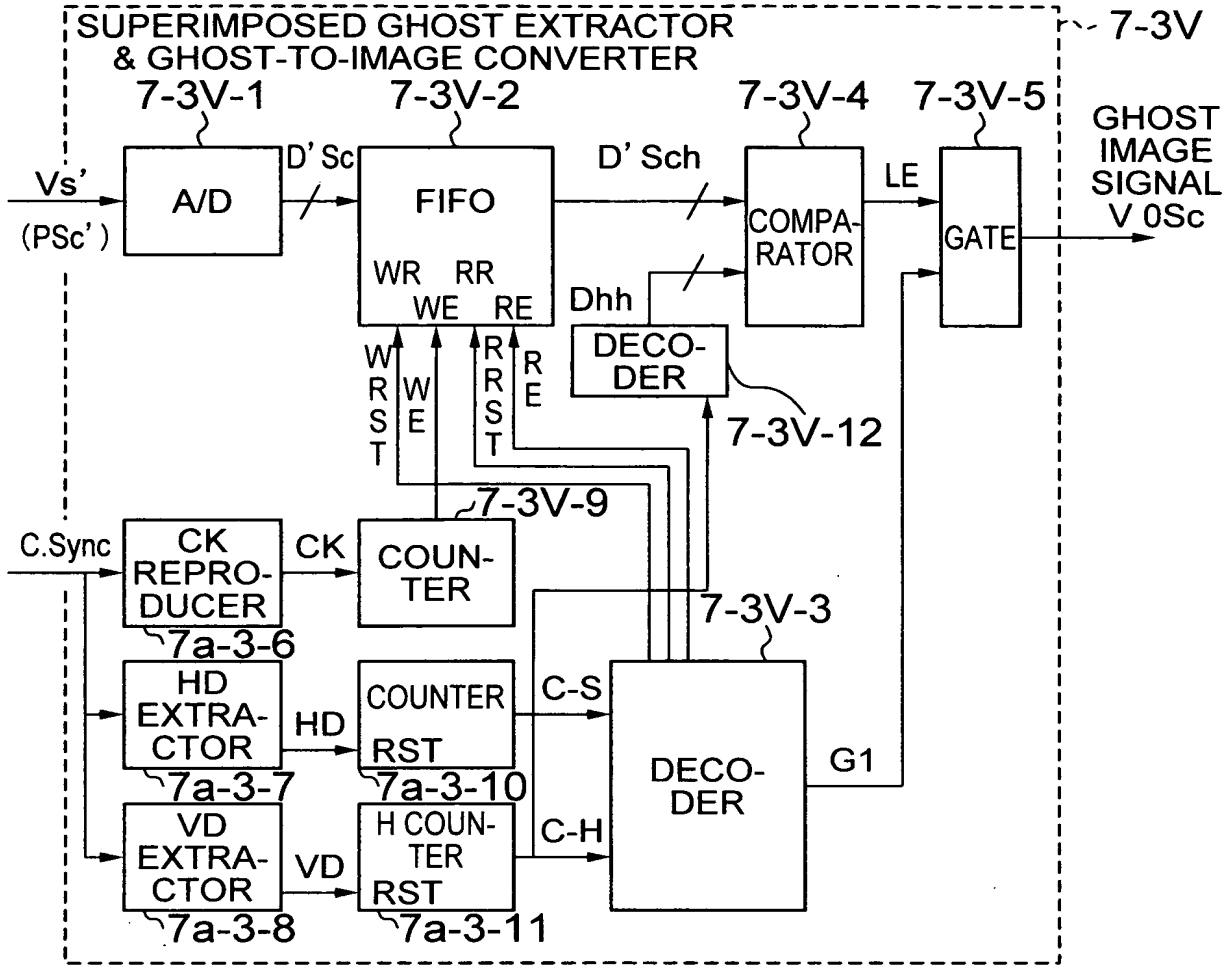


FIG. 66B

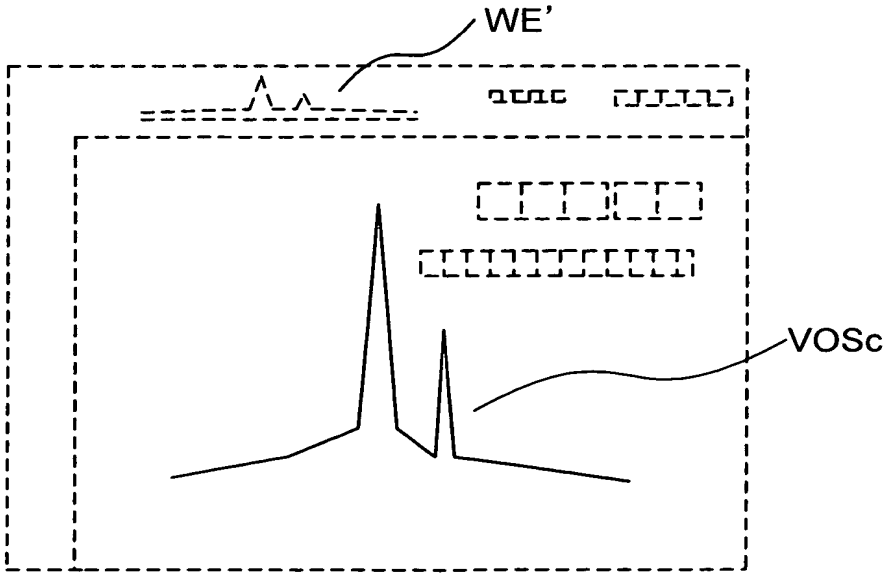


FIG. 67

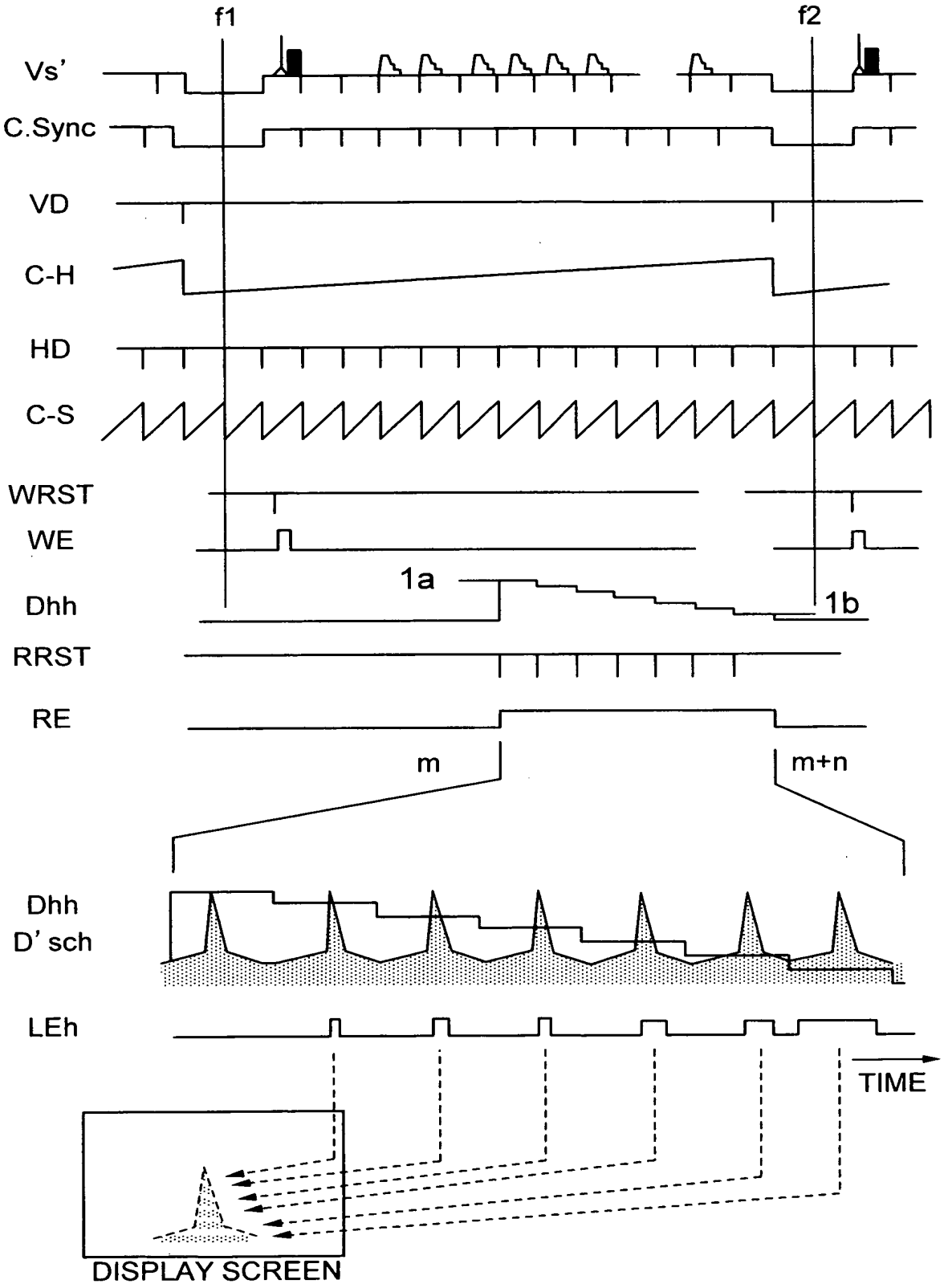

f1
f2
Vs'
C.Sync
VD
C-H
HD
C-S
WRST
WE
1a
1b
Dhh
RRST
RE
m
m+n
Dhh
D' sch
LEh
TIME
DISPLAY SCREEN

FIG. 68

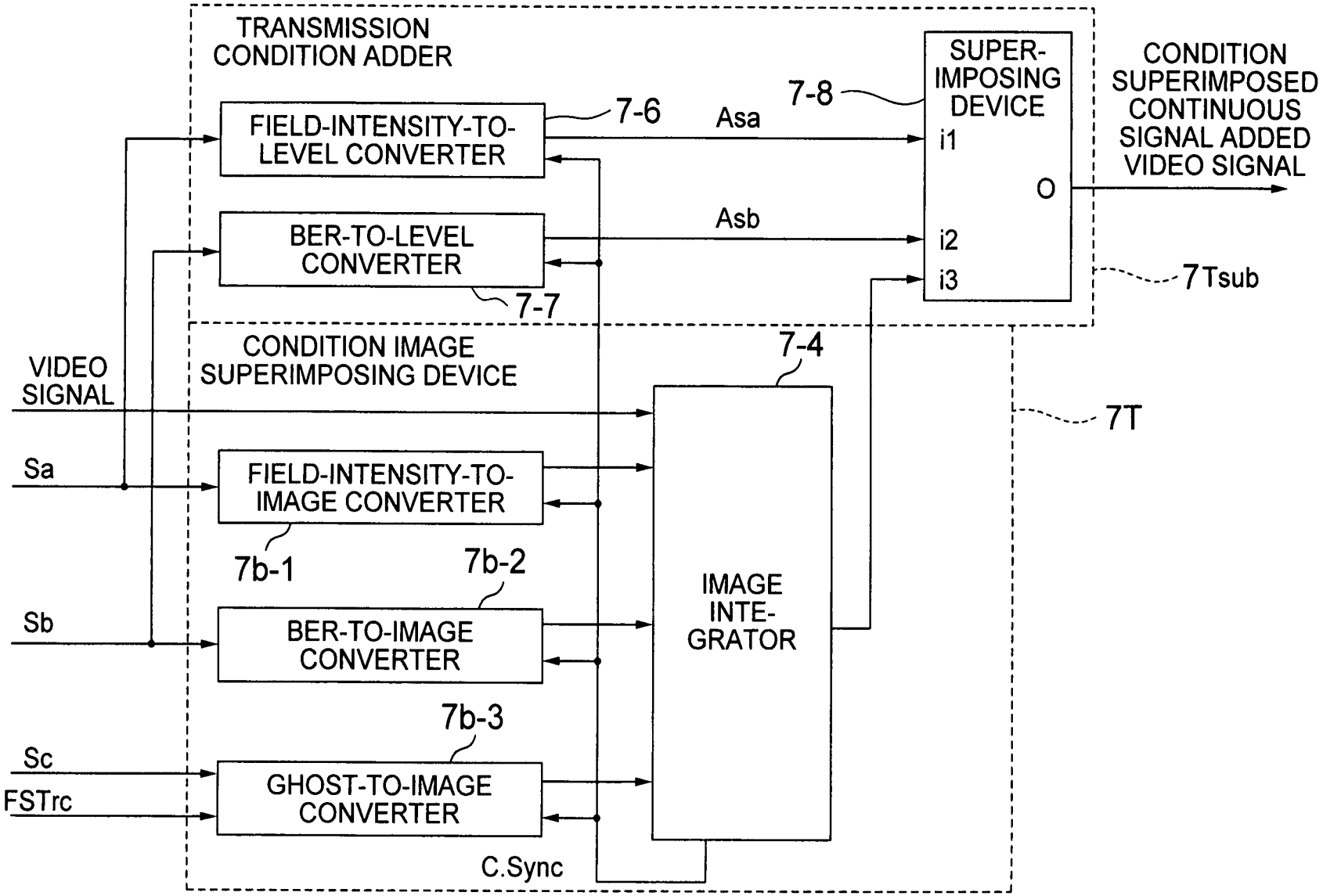

TRANSMISSION CONDITION ADDER
FIELD-INTENSITY-TO-LEVEL CONVERTER
7-6
Asa
7-8
SUPER-IMPOSING DEVICE
i1
O
i2
i3
CONDITION SUPERIMPOSED CONTINUOUS SIGNAL ADDED VIDEO SIGNAL
BER-TO-LEVEL CONVERTER
Asb
7-7
7Tsub
CONDITION IMAGE SUPERIMPOSING DEVICE
7-4
VIDEO SIGNAL
7T
Sa
FIELD-INTENSITY-TO-IMAGE CONVERTER
7b-1
7b-2
Sb
BER-TO-IMAGE CONVERTER
IMAGE INTE-GRATOR
7b-3
Sc
FSTrc
GHOST-TO-IMAGE CONVERTER
C.Sync

FIG. 69

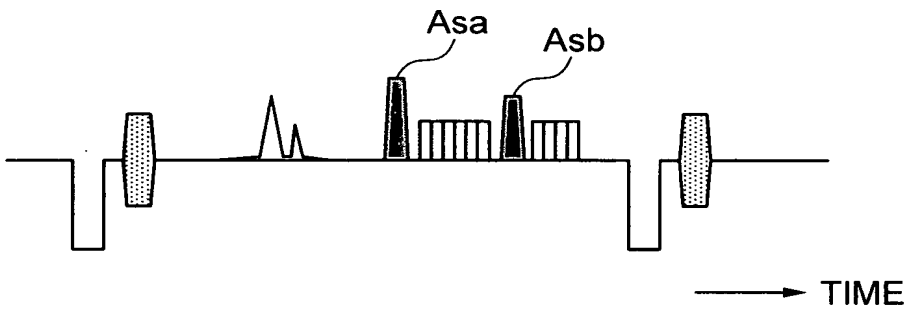


FIG. 70A

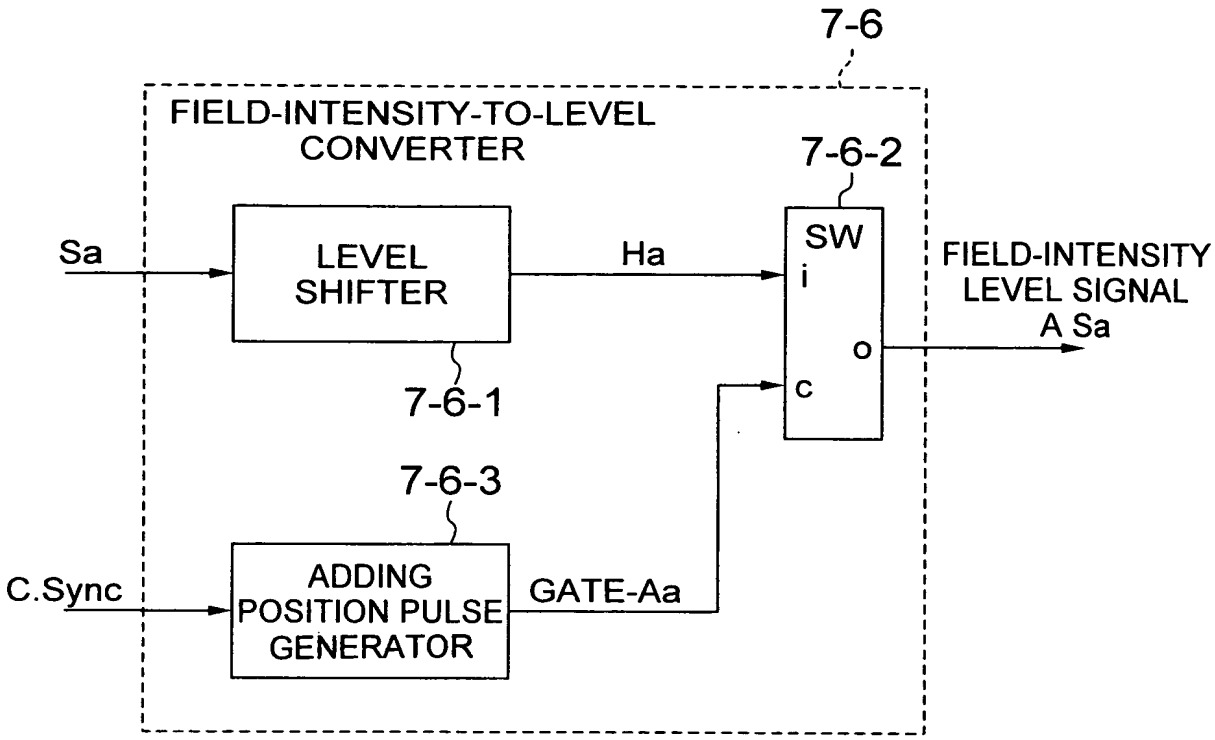


FIG. 70B

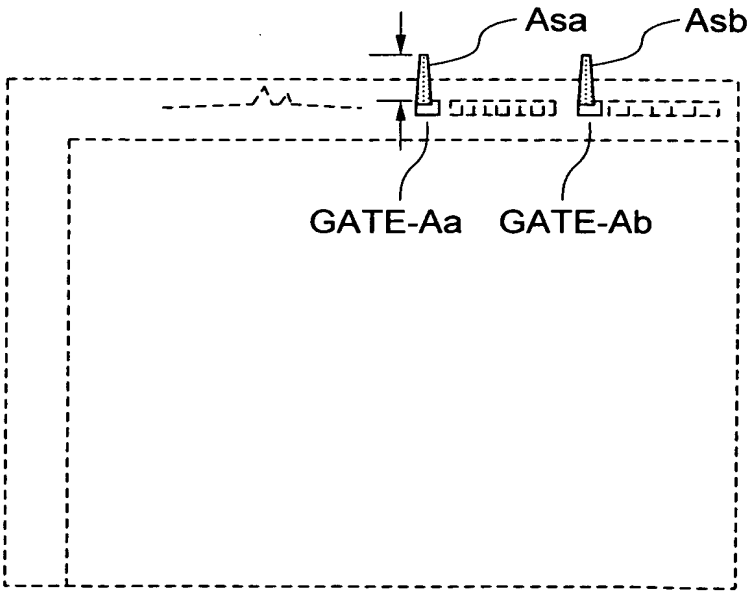


FIG. 71A

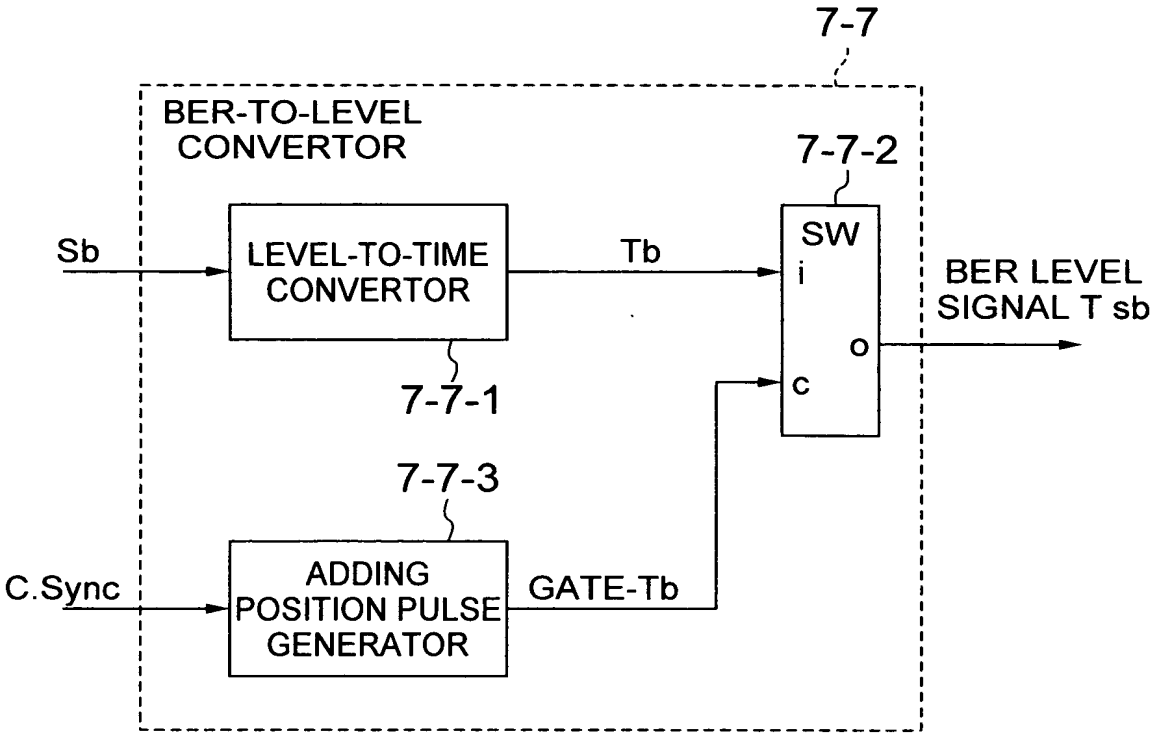


FIG. 71B

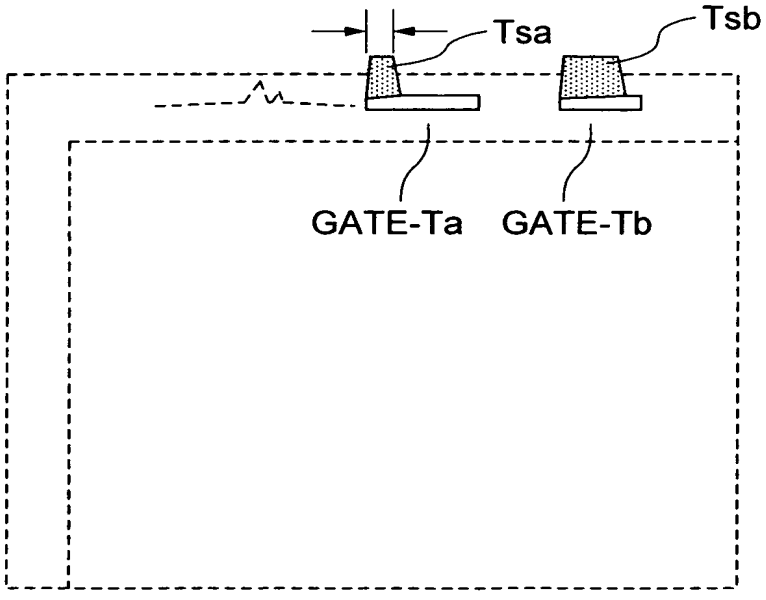


FIG. 72A

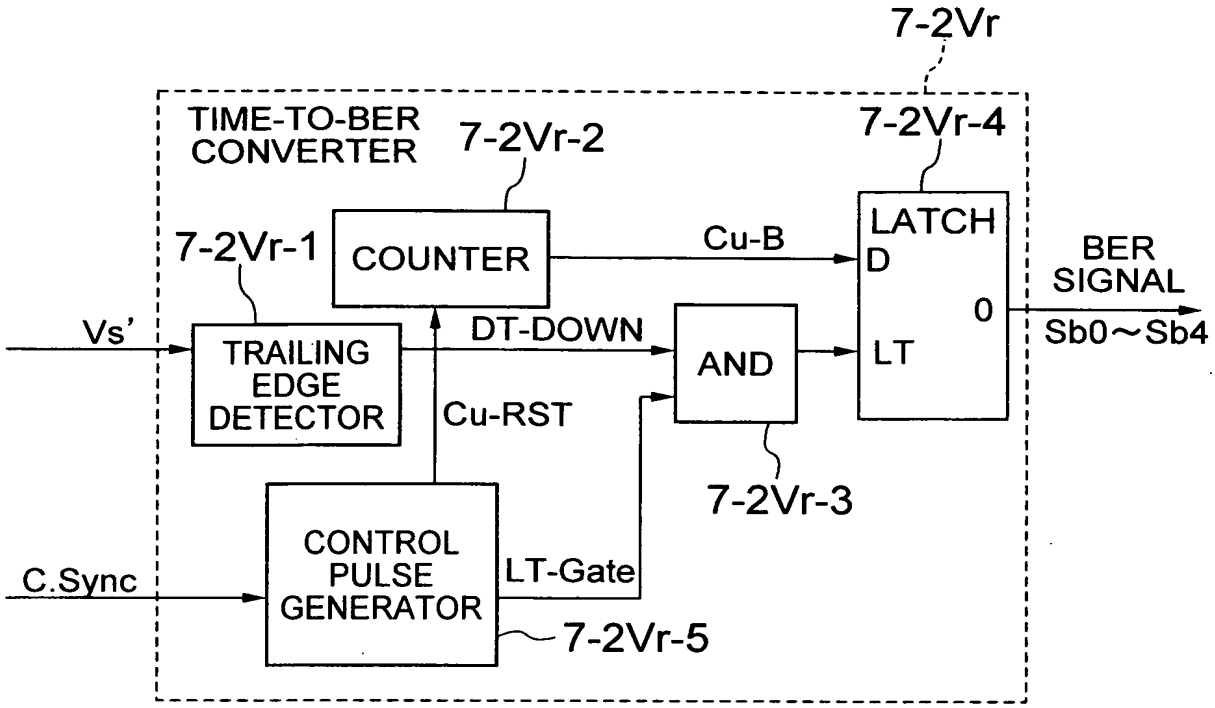


FIG. 72B

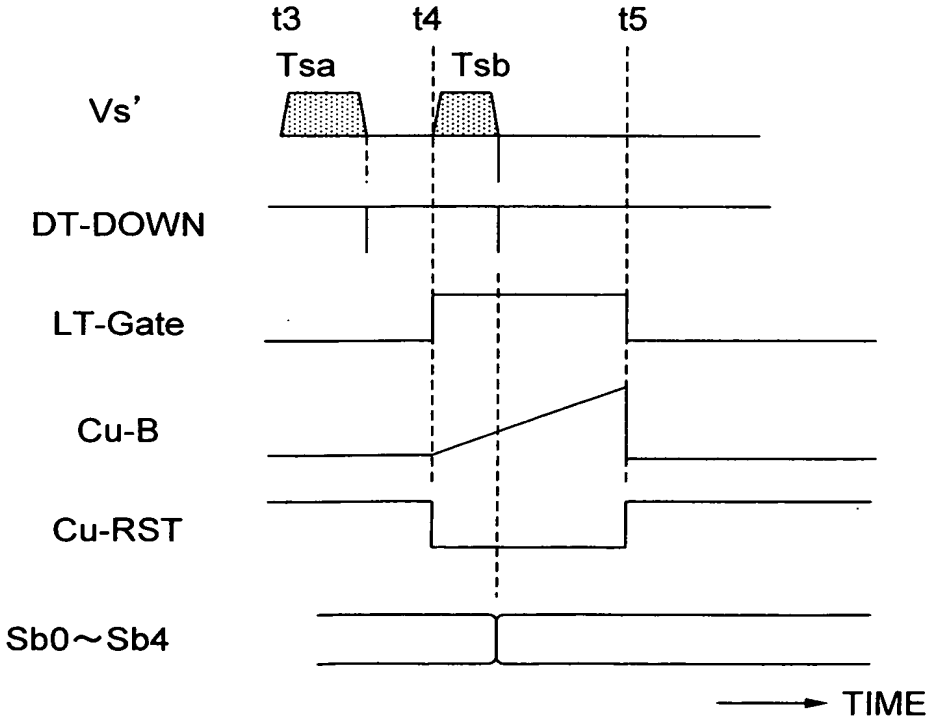
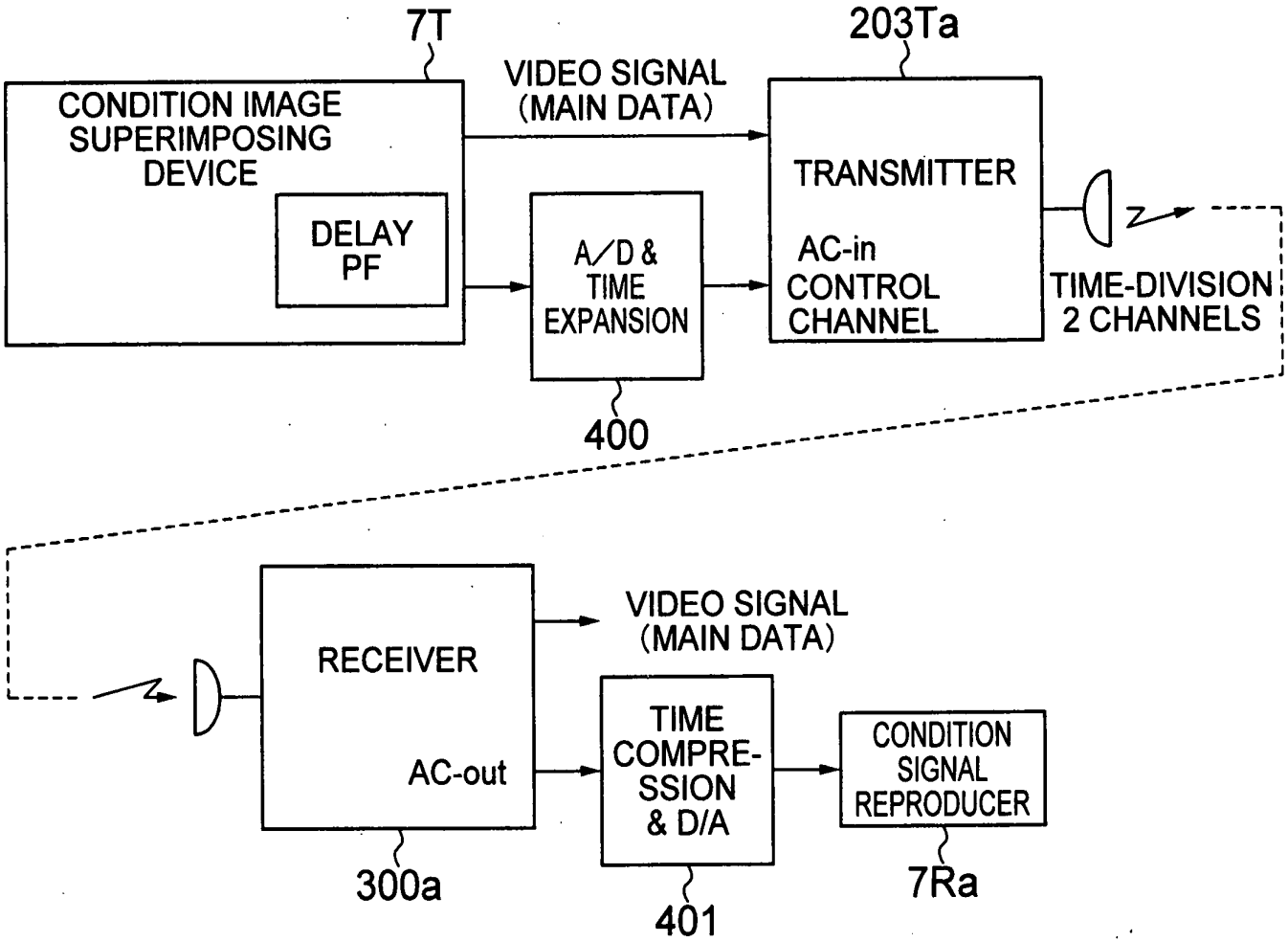


FIG. 73


7T
203Ta
CONDITION IMAGE SUPERIMPOSING DEVICE
DELAY PF
VIDEO SIGNAL (MAIN DATA)
A/D & TIME EXPANSION
TRANSMITTER
AC-in CONTROL CHANNEL
TIME-DIVISION 2 CHANNELS
400
RECEIVER
AC-out
VIDEO SIGNAL (MAIN DATA)
TIME COMPRE-SSION & D/A
CONDITION SIGNAL REPRODUCER
300a
401
7Ra